

MODEL 215 DISK DRIVE

FIELD PARTS CATALOG

RECORD OF REVISIONS

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SECTION 1

INTRODUCTION

GENERAL

This catalog provides an illustrated breakdown of all assemblies and circuit board modules used in the six configurations and options of the Model 215 Disk Drive. A Model 215 Disk Drive comprises two disk drives per cabinet. A Model 213 is essentially a Model 215 with a single drive per cabinet. Any reference in this catalog to the Model 215 is also applicable to the single drive Model 213.

SCOPE

This catalog is intended for use by personnel involved in the maintenance and provisioning of the Model 215 Disk Drive. The catalog is divided into two major sections:

- Illustrated Parts Breakdown
 - Cabinet and Drawer Components by Assembly
- Component Board Breakdown
 - Listing of Modules by Location
 - Listing of Module Components

RELATED DOCUMENTATION

Installation and Operation	IO215
Theory of Operation	TO215
Maintenance Manual	MM215
Field Data Package	FD215
Physical Planning Manual	PPCDS
Master Spare Parts List (MSPL)	*TB49
Lowest Operational Level (LOL)	TB51
Tech Rep Equipment List - Hand Tools	TB52
Tech Rep Equipment List - Test Equipment ...	TB53
Tech Rep Equipment List - Parts	TB54
Cross Reference Vendor List	TB55
Field Change Notice (FCN) Catalog	TB57
Field Change Notice (FCN) Status Verification .	TB94
*Technical Bulletin	

INTRODUCTION

General instructions for the use of this catalog are provided in the following paragraphs.

INDENTURE SYSTEM

Many of the assemblies used in the disk drive are built up from several subassemblies. Where applicable, the parts lists are indented to indicate the structure of such assemblies. In many cases it may be more economical to replace failed or damaged components at the sub-assembly level rather than at the component level. The indenture system allows the user to readily determine the component-to-subassembly relationship. The following example of an assembly parts list is provided to familiarize the user with the indenture system used in this catalog.

	Item	Part Number	Description
92661-002	1	92661-002	Assy, Control Panel (Standard)
Includes			
Items 1	2	90922-001	Lamp (387)
through	3	91028-004	Spring, Plunger
23	4	92735-001	Panel, Mounting
	5	92736-002	Panel, Dress
	6	92737-002	Bezel, Dress
	7	92742-001	Receptacle, ID Knob
	8	92643-xxx*	Assy, Knob, ID
	9	92968-030	Lens, Red, SELECT LOCK
	10	92968-xxx*	Lens, Green, A-J
	11	93007-001	Nut, Push On
92745-001	12	92745-001	Assy, PWB, Mod. ID
Includes	13	90065-001	Switch, Micro
Items 12	14	90605-015	Receptacle, J22,J23
through	15	92746-001	Board, PW, Mod. ID
17	16	92902-002	Switch, Keyboard
	17	92983-001	Button, Switch
92958-001	18	92958-001	Assy, PWB, Switch/Ind
Includes	19	90605-015	Receptacle, J11
Items 18	20	90693-037	Washer, Fibre
through	21	92959-001	Board, PW, Switch/Ind
23	22	92967-001	Indicator Light
	23	92970-001	Switch, Lever

ILLUSTRATED PARTS BREAKDOWN

The illustrated parts breakdown provides an assembly parts list with part number and approved nomenclature for each item of the assembly. All assemblies, and their detail parts, are referenced to the illustration by item number callouts. Where two or more illustrations are required, for the same parts list, the figure number is also referenced.

Item Column

The Item column lists all items of the assembly. This item number is used as the index reference on the illustration, and only significant items are referenced.

Part Number Column

The Part Number column lists the assembly, subassembly, and detail parts, in numerical order by subassembly. Always use the part number exactly as listed when ordering parts.

Description Column

The Description column lists the approved nomenclature and detail description of the assembly, subassembly, or detail part, as it appears on the engineering drawing. The column follows the indenture system of the part number.

Figure Column

The Figure column is added to the assembly parts list when two or more illustrations are required for adequate support of the parts list.

Attaching Hardware

The attaching hardware for the baseplate assemblies, or groups, are listed immediately following the assembly components parts list. The caption Attaching Hardware appears in the Part Number column preceding the attaching parts.

COMPONENT BOARD BREAKDOWN

The component board breakdown provides a plug-in module parts list with a part number and standard nomenclature and value, for each component of the module assembly. All module parts lists are illustrated using the component board layout for easy referencing.

Item Column

The Item Column lists, in alpha-numeric order, the reference designators assigned to electronic components used by the module, as shown in the illustration. Item one is the module assembly and top assembly for the parts list.

Part Number Column

The Part Number column lists the part numbers of the module assembly and all detail component parts of the assembly. Always use the part number exactly as listed when ordering parts.

Description Column

The Description column lists the standard nomenclature and value of all electronic components used on the module. The column follows the indenture system of the part number.

OPTIONS

The Model 215 Disk Drive is supplied in six basic configurations. The following descriptions outline the features of each configuration as an aid to identification.

Original Equipment Manufacturers (OEM) 60 Hz Version

Part Number	93971-001
Features	This model features data protection by an operator-controlled read-only switch and utilizes the 93683 control panel. Also features is a 75-pin interface utilizing the 95036 connector panel.
Options	91725-001 Sector Generator AL22, Location B11
Interface	90966-001 5V DTL Driver AN18, Location B04, B05 90970-001 5V DTL Receiver AN19, Location B03
AC Cable	90609-xxx 60 Hz
Dc Cable	91785-xxx 5V DTL
Signal Cable	90612-xxx 75 Pin
Terminator	91190-001 5V DTL 75 Pin
Logic Diagrams	93989-001

Original Equipment Manufacturers (OEM) 60 Hz Version

Part Number	91900-002
Features	This model features removable identification plugs utilizing the 92661 control panel. Also featured is a 104-pin interface utilizing the 95035 connector panel.
Options	Same as 91900-001
Interface	Same as 91900-001
Ac Cable	Same as 91900-001
Dc Cable	Same as 91900-001
Signal Cable	92914-xxx 104 Pin 93983-xxx (when 215 is stand-alone)
Terminator	93216-001 5V DTL 104 Pin
Logic Diagrams	93335-001

Original Equipment Manufacturers (OEM) 50 Hz Version

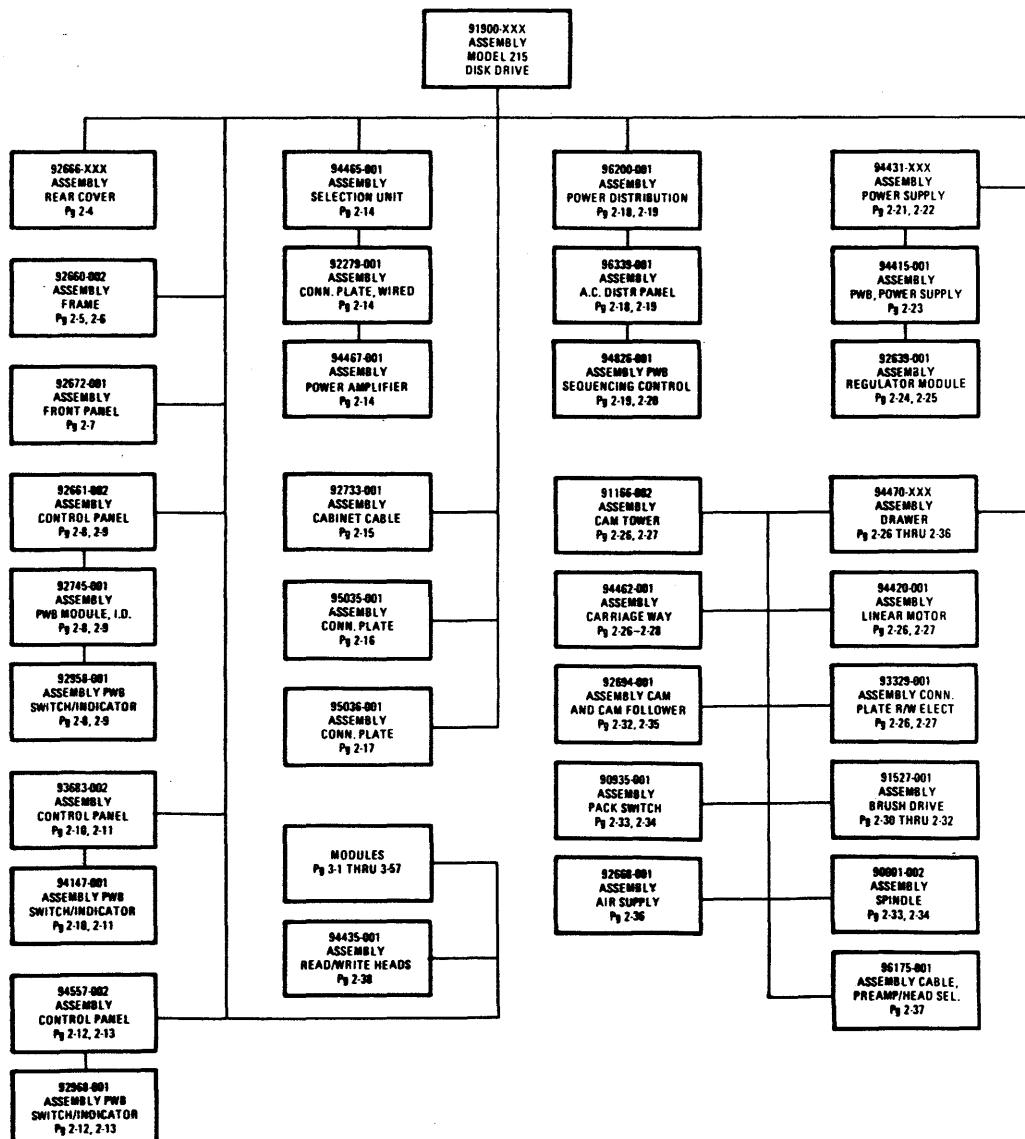
Part Number	91900-003
Features	This model is a 50 Hz version of 91900-001.
Ac Cable	91552-xxx 50 Hz

Original Equipment Manufacturers (OEM) 50 Hz Version		Interface	Same as 91900-001
Part Number 91900-004		Ac Cable	Same as 91900-001
Features This model is a 50 Hz version of 91900-002		Dc Cable	Same as 91900-001
Ac Cable 91552-xxx 50 Hz		Signal Cable	94504-xxx 75-Pin
IBM-Compatible 60 Hz Version		Terminator	91190-001 5V DTL 75-Pin
Part Number 91900-005		Logic Diagrams	93335-001
Features This model, when utilized by the Model 1015 Disk Drive Controller, is compatible to IBM System 360 processors, Model 25 and up. This model utilizes the 94557 control panel and a 75-pin interface utilizing the 95036 connector panel.		IBM-Compatible 50 Hz Version	
Options None		Part Number	91900-006
		Features	This model is a 50 Hz version of 91900-005
		Ac Cable	91552-xxx 50Hz
-xxx following cable part numbers indicates length. 010=10ft, 015=15Ft, 020=20ft, 040=40ft, etc.			

PRESENTATION

The following illustration represents the breakdown of the disk drive, by major assemblies, and the

manner in which the field parts catalog has been organized.



SECTION 2

ILLUSTRATED PARTS BREAKDOWN

GENERAL

This section provides the illustrations and assembly parts lists for all assemblies used in the disk drive. The assemblies are presented in the order of disassembly from the assembled disk drive to the lowest-order subassembly.

Photographic and line illustrations are used. All items of all assemblies are listed, and significant items are referenced to the illustration. All standard, OEM, and optional information is supplied.

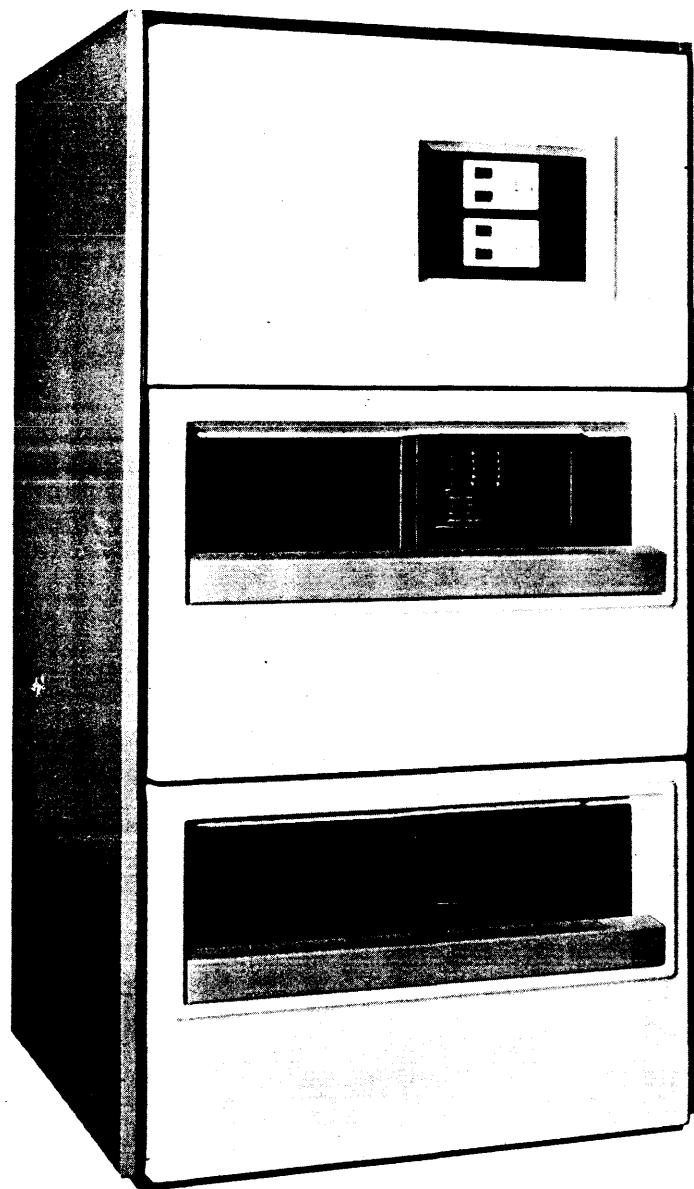


Figure 2-1. Model 215 Disk Drive

Item	Part Number	Description	Figure
1	91900-001	215 Disk Drive	
2	92961-001	Cover, Control Panel	
3	92675-xxx	Panel, Side	
4	92814-001	Door, Rear	N/I
5	92697-001	Filter, Rear Door	N/I
6	93402-001	Bracket, Rear Door Latch	N/I
7	93408-001	Latch, Push Button, Rear Door	N/I

N/I (Item not visible in illustration)

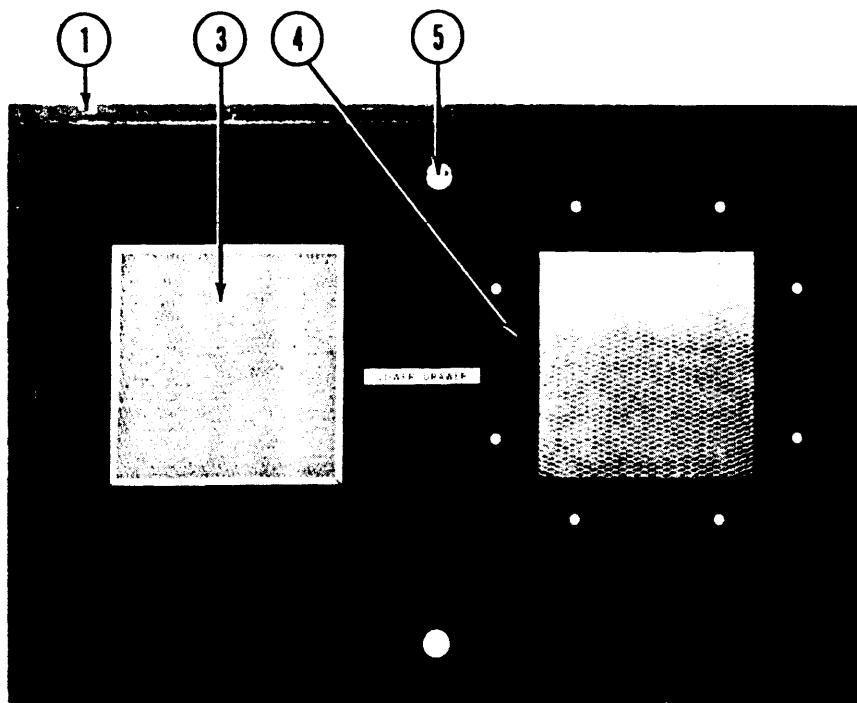


Figure 2-2. Assy, Rear Cover, Lower

Item	Part Number	Description	Figure
1	92666-002	Assy, Rear Cover, Lower	
2	92666-001	Assy, Rear Cover, Upper	N/I
3	92697-001	Prefilter, Exhaust	
4	92774-001	Gasket, Air Supply	
5	93041-001	Fastener, Adjustable	

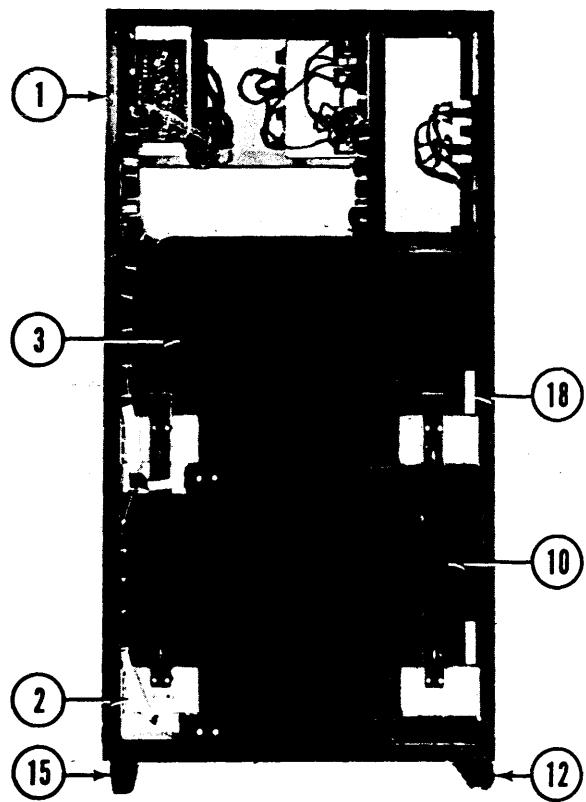


Figure 2-3. Assy, Frame, Front View

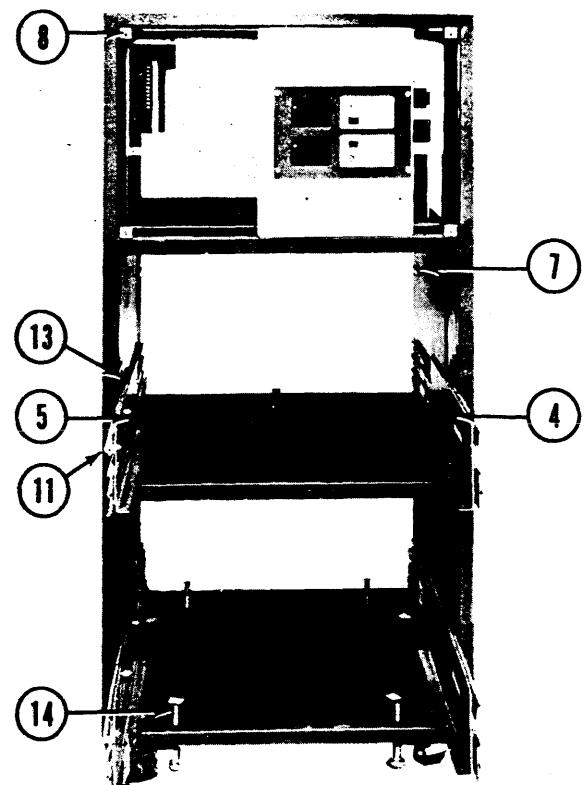


Figure 2-4. Assy, Frame, Front View

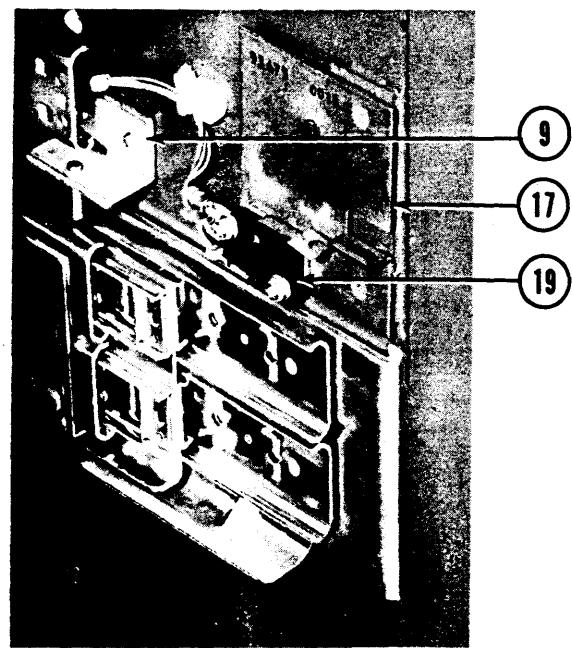


Figure 2-5. Assy, Lock Plate

Item	Part Number	Description	Figure
1	92660-002	Assy, Frame	3
2	90953-005	Pin, Roll	3
3	92678-351	Weldment, Frame	3
4	92675-001	Slide, Dual, Right-hand	4
5	92675-002	Slide, Dual, Left-hand	4
6	92907-001	Stop, Select Unit	N/I
7	92920-001	Bracket, Spring	4
8	92962-001	Bracket, Cover Mtg	4
9	92964-001	Trip, Cam	5
10	93358-001	Interlock, Drawer	3
11	93361-001	Cam, Interlock	4
12	93390-001	Caster, Swivel, Front	3
13	93666-002	Plate, Lock, Left-hand	4
14	93710-001	Screw, Leveling	4
15	93722-001	Caster, Fixed, Rear	3
16	93673-001	Assy, Lock Plate	5
17	93666-001	Plate, Lock, Right-hand	5
18	93678-001	Plate, Washer	3
19	93716-001	Switch, Drawer	5

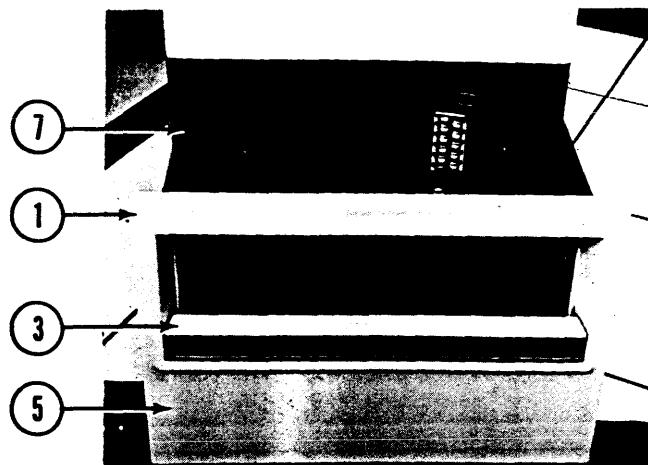


Figure 2-6. Assy, Front Panel

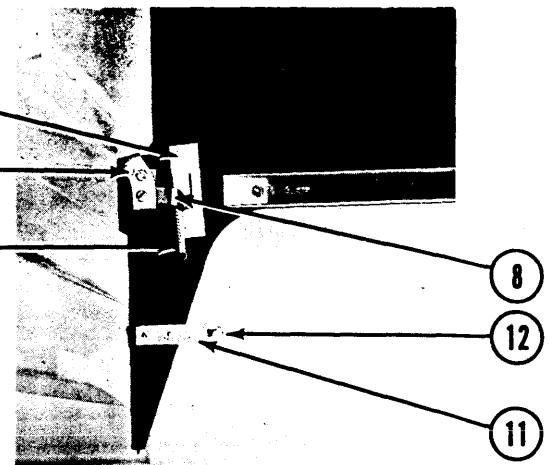


Figure 2-7. Assy, Front Panel, Detail

Item	Part Number	Description	Figure
1	92672-001	Assy, Front Panel	6
2	90486-018	Screw, Shoulder	N/I
3	92767-001	Machined Handle	6
4	92769-001	Bracket, Handle	7
5	92772-001	Panel, Front	6
6	92781-004	Spring, Tension	7
7	92866-001	Disk Pack Cover	6
8	92867-001	Pawl, Locking, Right-hand	7
9	92867-002	Pawl, Locking, Left-hand	N/I
10	93522-001	Adjustable Stop	7
11	93543-001	Base, Adj. Stop	7
12	93544-012	Screw, Locking	7

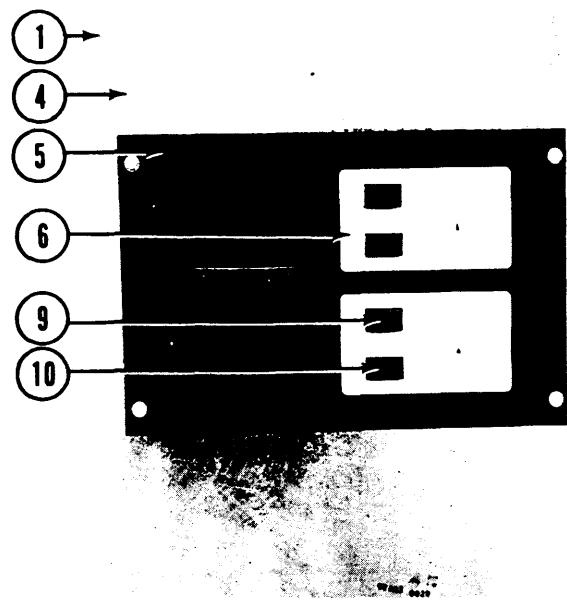


Figure 2-8. Assy, Control Panel
Front View

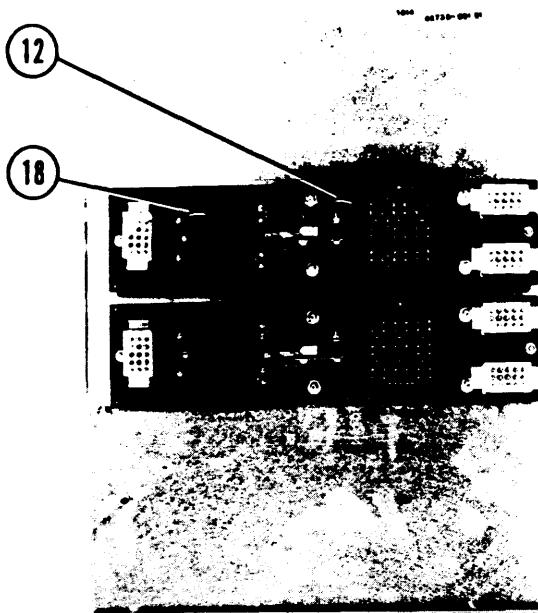


Figure 2-9. Assy, Control Panel
Rear View

This control panel is utilized in the 91900-002, -004 versions of the Model 215 Disk Drive.

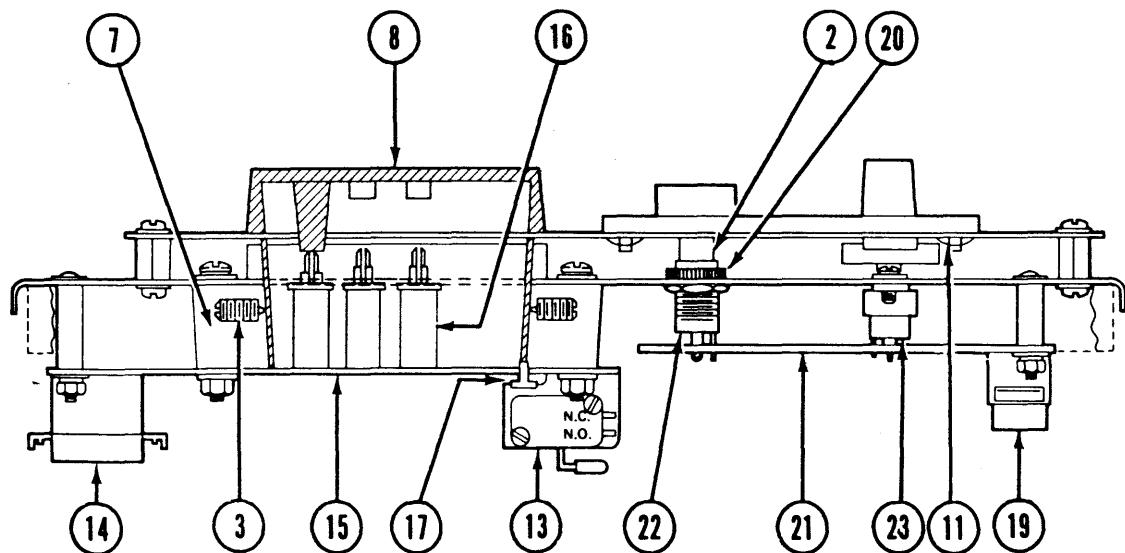


Figure 2-10. Assy, Control Panel
Detail

Item	Part Number	Description	Figure
1	92661-002	Assy, Control Panel	8
2	90922-001	Lamp (387)	10
3	91028-004	Spring, Plunger	10
4	92735-001	Panel, Mounting	8
5	92736-002	Panel, Dress	8
6	92737-002	Bezel, Dress	8
7	92742-001	Receptacle, ID Knob	10
8	92743-xxx*	Assy, Knob, ID	10
9	92968-030	Lens, Red, (SELECT LOCK)	8
10	92968-xxx**	Lens, Green, (A-J)	8
11	93007-001	Nut, Push-On	10
12	92745-001	Assy, PWB, Mod. ID	9
13	90065-001	Switch, Micro	10
14	90605-015	Receptacle, J22, J23	10
15	92746-001	Board, PW, Mod. ID	10
16	92902-002	Switch, Keyboard	10
17	92983-001	Button, Switch	10
18	92958-001	Assy, PWB, Switch/Ind	9
19	90605-015	Receptacle, J11	10
20	90693-037	Washer, Fiber	10
21	92959-001	Board, PW, Switch/Ind	10
22	92967-001	Indicator Light	10
23	92970-001	Switch, Lever	10

*92743-001 = Unit 0 **92968-001 = A
92743-002 = Unit 1 92968-002 = B
92743-003 = Unit 2 92968-003 = C
92743-004 = Unit 3 92968-004 = D
92743-005 = Unit 4 92968-005 = E
92743-006 = Unit 5 92968-006 = F
92743-007 = Unit 6 92968-007 = G
92743-008 = Unit 7 92968-008 = H
92743-009 = Unit S 92968-009 = J
92968-100 Kit, Lenses A-J

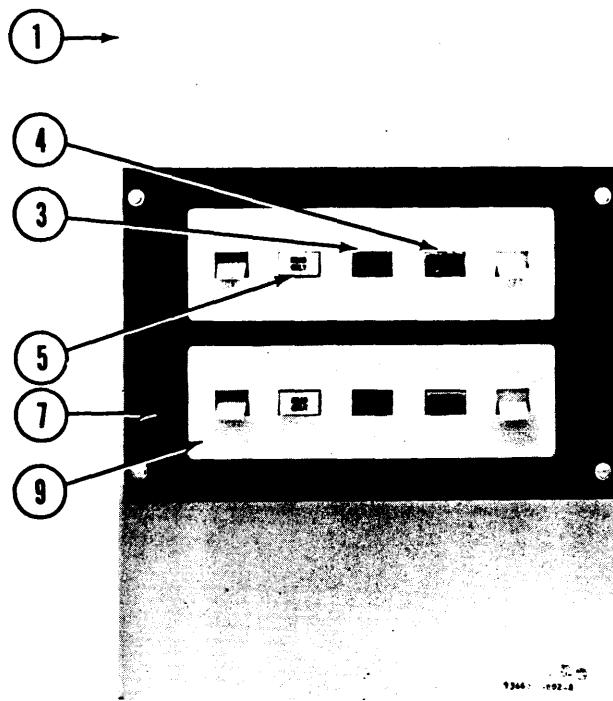


Figure 2-11. Assy, Control Panel
Front View

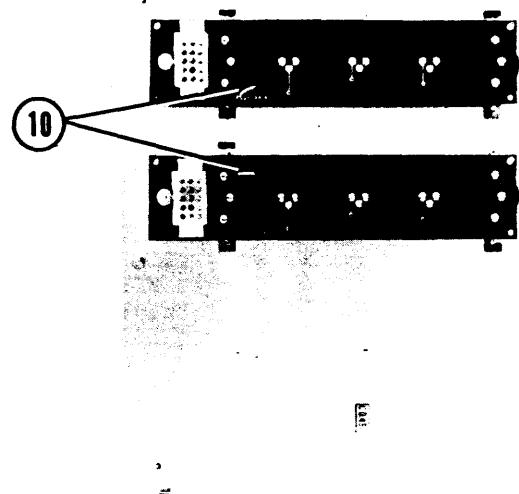


Figure 2-12. Assy, Control Panel
Rear View

This control panel is utilized in the 91900-001, -003 versions of the Model 215 Disk Drive.

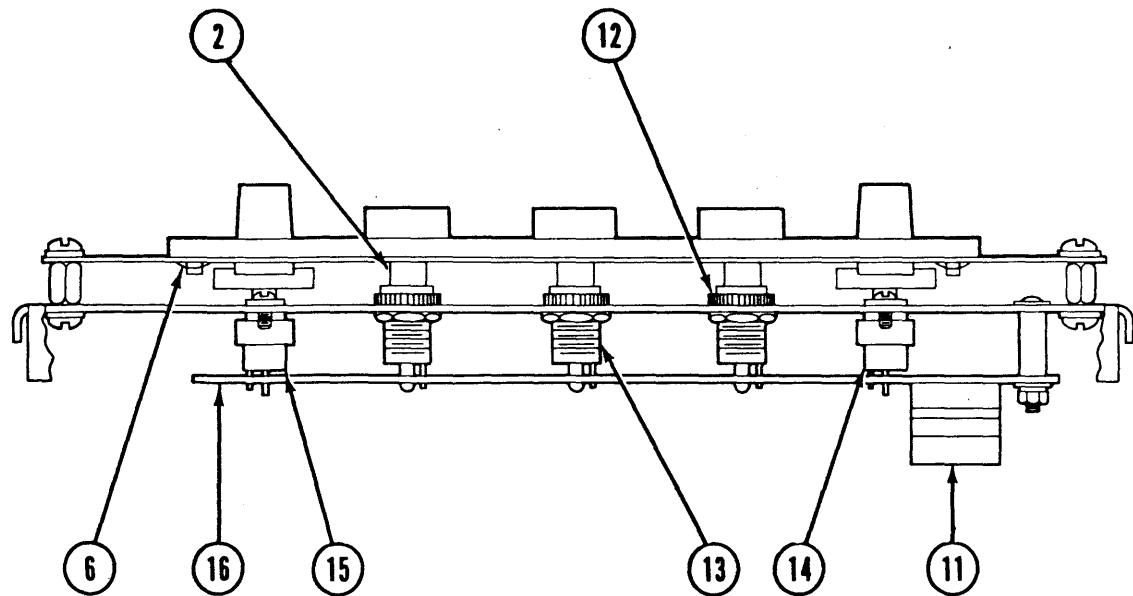


Figure 2-13. Assy, Control Panel, Detail

Item	Part Number	Description	Figure
1	93683-002	Assy, Control Panel	11
2	90922-001	Lamp	13
3	92968-030	Lens (Red) SELECT LOCK	11
4	92968-100	Lens (Green A-J)	11
5	92968-032	Lens (Yellow)	11
6	93007-001	Nut, Push-On	13
7	93366-001	Panel, Dress	11
8	93367-001	Panel, Mounting	11
9	93686-001	Bezel, Dress	11
10	94147-001	Assy, PWB Switch/Ind	12
11	90605-015	Receptacle, J11	13
12	90693-037	Washer, Fiber	13
13	92967-001	Indicator Light	13
14	92970-001	Switch, Lever	13
15	92970-003	Switch, Lever	13
16	94148-001	PWB, Switch/Ind	13

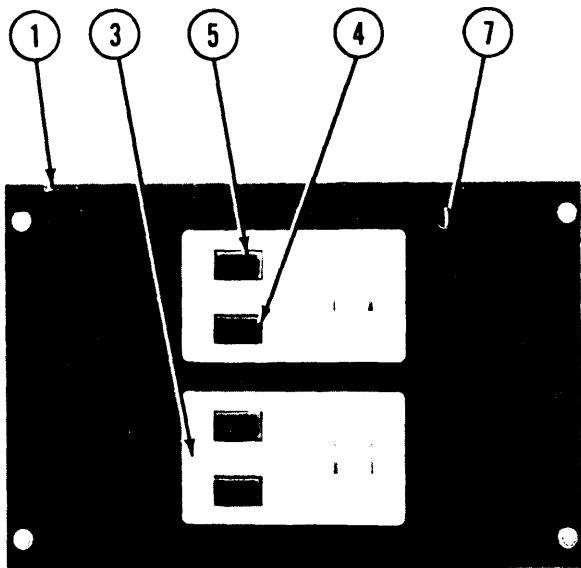


Figure 2-14. Assy, Control Panel, Front View

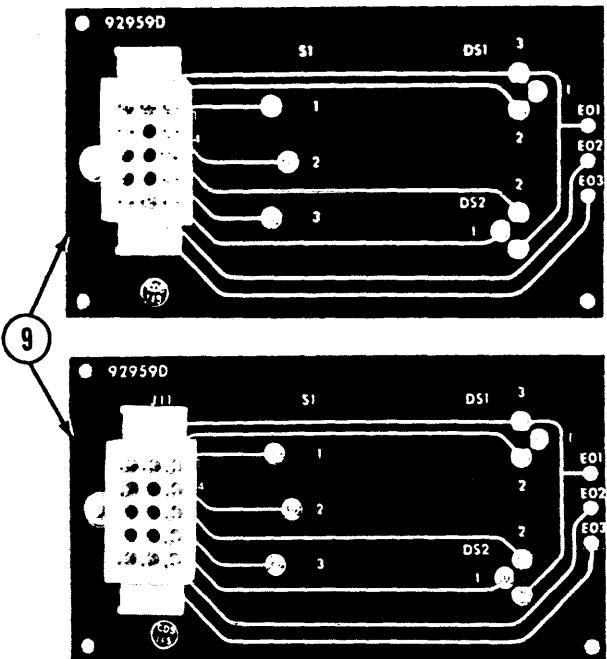


Figure 2-15. Assy, Control Panel, Rear View

This Panel provided with -005, -006 options, which utilize CDS 1015 Controller.

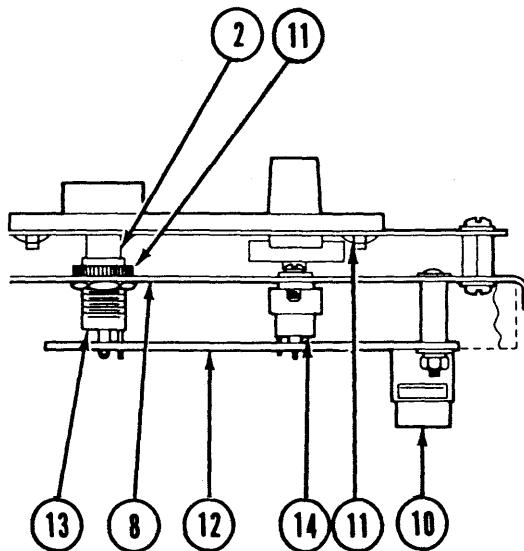


Figure 2-16. Assy, Control Panel, Detail

Item	Part Number	Description	Figure
1	94557-002	Assy, Control Panel	14
2	90922-001	Lamp (387)	16
3	92737-002	Bezel, Dress	14
4	92968-xxx	Lens, (Green A-J)	14
5	92968-033	Lens, (Red) SELECT LOCK	14
6	93007-001	Nut, Push On	16
7	94558-001	Panel, Dress	14
8	94559-001	Panel, Component Mtg	16
9	92968-001	Assy, PWB, Switch/Ind	15
10	90695-015	Receptacle, J11	16
11	90693-037	Washer, Fiber	16
12	92959-001	Board, PW, Switch/Ind	16
13	92967-001	Indicator Light	16
14	92970-001	Switch, Lever	16

This panel provided with -005, -006 options, which utilize CDS 1015 Controller.

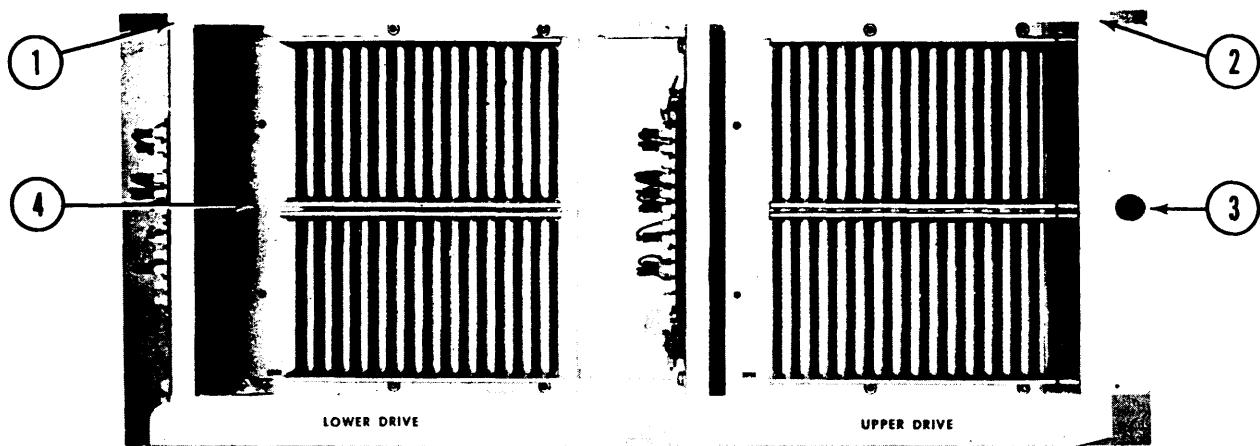


Figure 2-17. Assy, Selection Unit

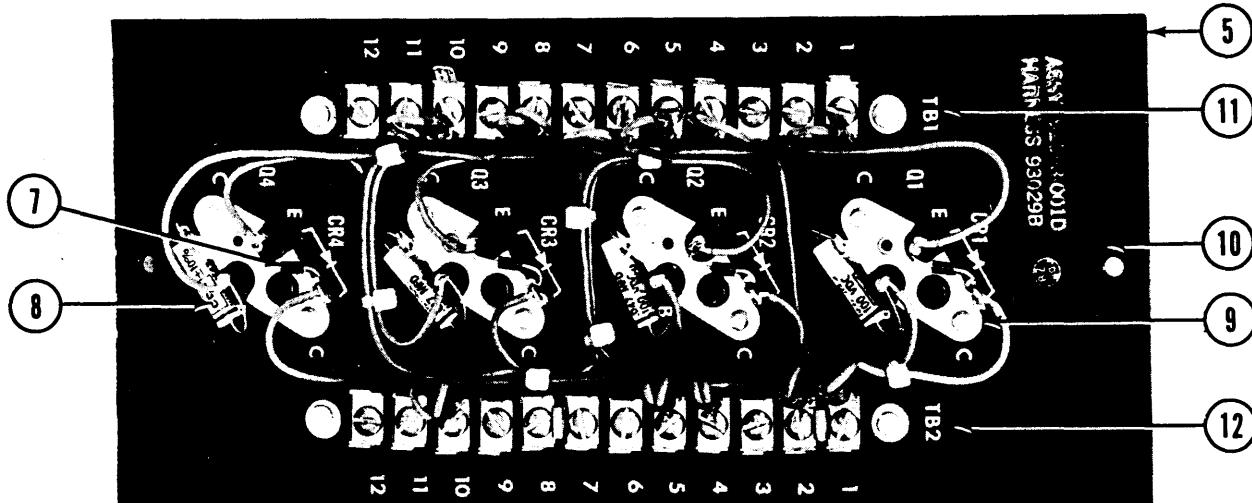
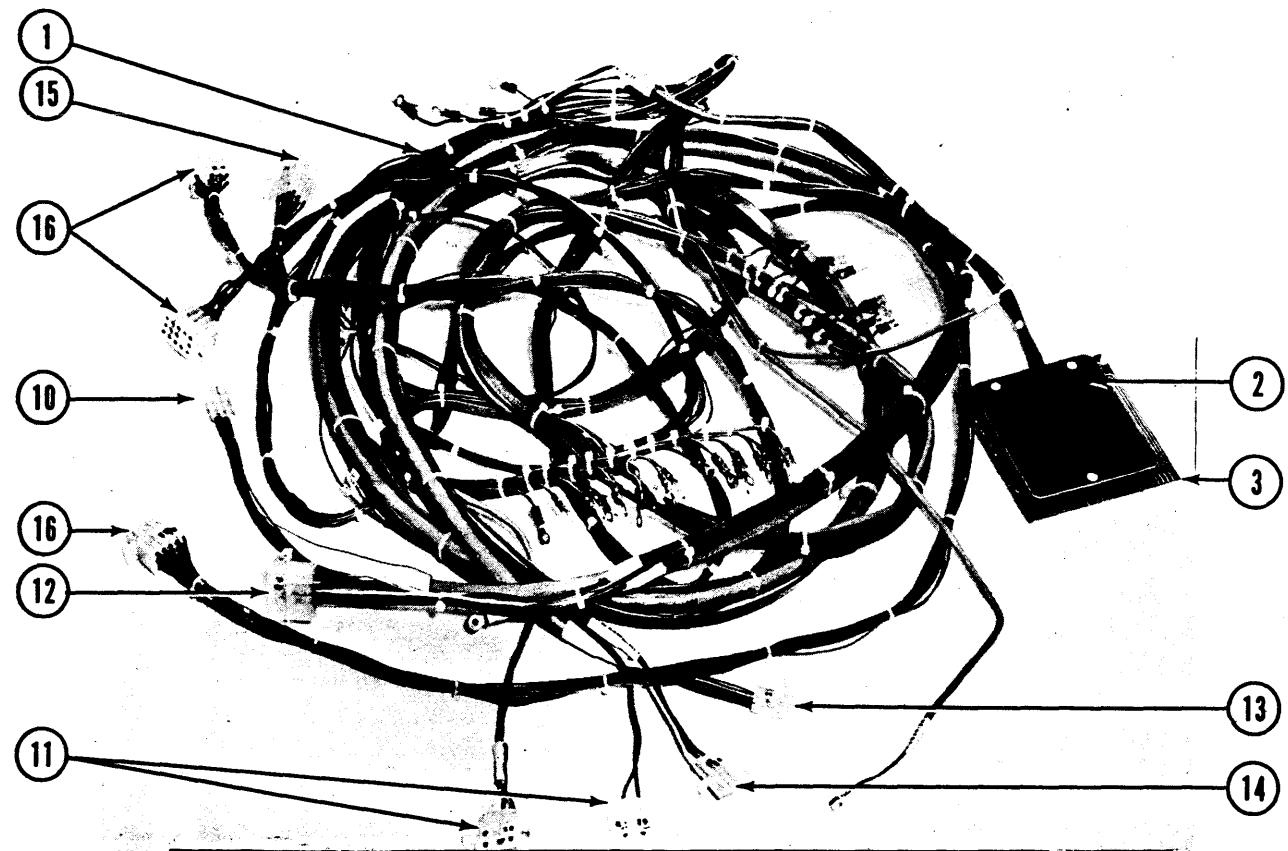


Figure 2-18. Assy, Power Amplifier

Item	Part Number	Description	Figure
1	94465-001	Assy, Selection Unit	17
2	92637-001	Chassis, Selection Unit	17
3	92722-001	Latch	17
4	92279-001	Assy, Connector Plate, Wired	17
5	94467-001	Assy, Power Amplifier	18
6	94251-001	Transistor, NPN, Q1-Q4	N/I
7	90344-002	Diode, CR1-CR4	18
8	90355-473	Capacitor, Mylar, .047Mf, C1-C4	18
9	90886-001	Socket, T0-3	18
10	92569-001	Heat Sink	18
11	93539-012	Term. Block, TB1	18
12	93540-001	Term. Block, TB2	18

See PWB Section for Selection Unit Module Layout



**Figure 2-19. Assy, Cabinet Cable
(Upper Drawer)**

Item	Part Number	Description	Figure
1	92733-001	Assy, Cabinet Cable (Upper Drawer)	
1A	92733-002	Assy, Cabinet Cable (Lower Drawer)	N/I
2	90290-001	Assy, Cable Plug Module, P01B	
3	90291-001	PWB, Cable Plug Module	
4	90356-002	Capacitor, 3.3Mfd. P01B, C1-C6	N/I*
5	90356-003	Capacitor, 1.0 Mfd. P01B, C7-C10	N/I*
6	90364-102	Resistor, 1/4w, 5%, 1K, P01B, R28-31,43-46	N/I*
7	90364-103	Resistor, 1/4w, 5%, 10K P01B, R7,10,13,19,21,27	N/I*
8	90364-153	Resistor, 1/4w, 5%, 15K P01B, R36	N/I*
9	90364-303	Resistor, 1/4w, 5%, 30K P01B, R36G	N/I*
10	90605-003	Conn. P12	
11	90605-004	Conn. P18,19	
12	90605-015	Conn. P8	
13	90606-003	Conn. P13	
14	90606-004	Conn. P14	
15	90606-012	Conn. P10	
16	90606-015	Conn. P9, 11, 15	

See PWB Component Section for 90290-001 Component Layout

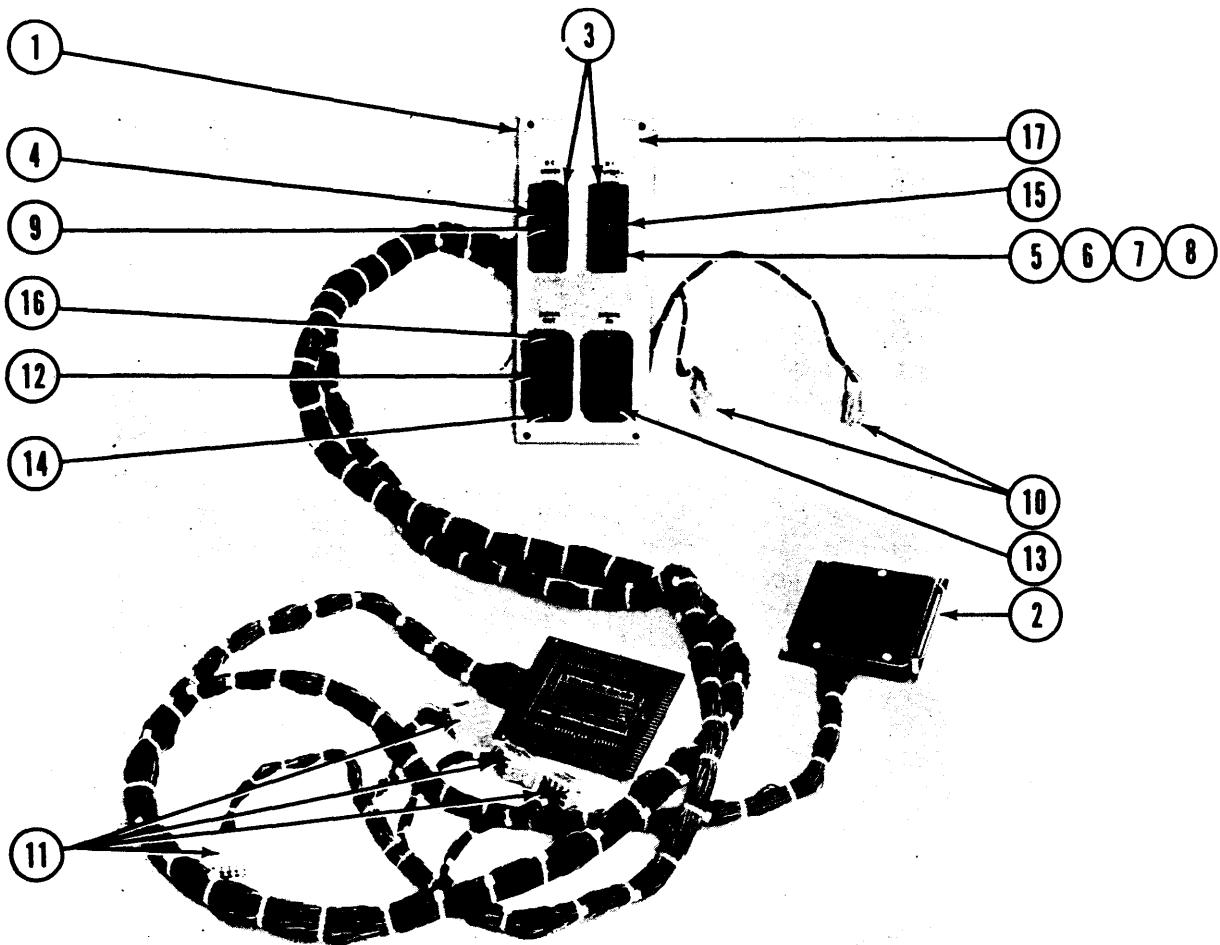


Figure 2-20. Assy, Connector Plate,
104 Pin (STD)

Item	Part Number	Description
1	95035-001	Assy, Conn. Plate, 104 Pin (STD)
2	90290-001	Assy, Cable Plug Module
3	90422-001	Conn. Block, 29 Pin, J5
4	90428-001	Conn. Pin
5	90430-001	Term. Male, Coax, J5
6	90591-001	Ferrule, Coax, J5
7	90592-001	Spring, Retension, Coax
8	90593-001	Bushing, Coax
9	90595-001	Jackscrew, Female
10	90606-012	Conn. Receptacle, P6
11	90606-015	Receptacle, P22, 23
12	90993-001	Conn. Block, J4
13	90993-002	Conn. Block, J3
14	90994-001	Pin, Guide, Male, J3, J4
15	92215-001	Conn. Pin, Femal, J3, J4
16	92216-001	Conn. Pin, Male, J5
17	92357-001	Pin, Guide, Female, J3, J4
18	92680-001	Plate, Connector

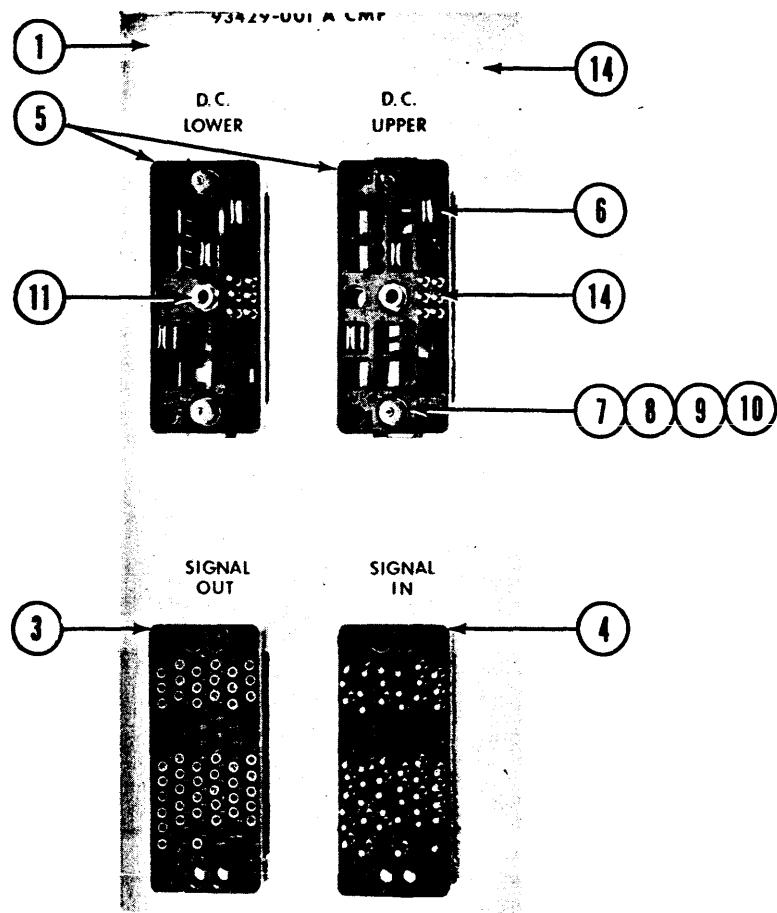


Figure 2-21. Assy, Connector
Plate, 75 Pin (OEM)

Item	Part Number	Description	Figure
1	95036-001	Assy, Conn. Plate, 75 Pin (OEM)	
2	90290-001	Assy, Cable Plug Module	N/I
3	90419-001	Conn. Block, 75 Pin, J3	
4	90419-002	Conn. Block, 75 Pin, J4	
5	90422-001	Conn. Block, 29 Pin, J5	
6	90428-001	Conn. Pin	
7	90430-001	Term. Male, Coax, J5	
8	90591-001	Ferrule, Coax, J5	
9	90592-001	Spring, Retension, Coax	
10	90593-001	Bushing, Coax	
11	90595-001	Jackscrew, Female	
12	90606-012	Conn. Receptacle J6	N/I
13	92215-001	Conn. Pin, Female, J3, J4	
14	92216-001	Conn Pin, Male J5	
15	93429-001	Plate, Connector	

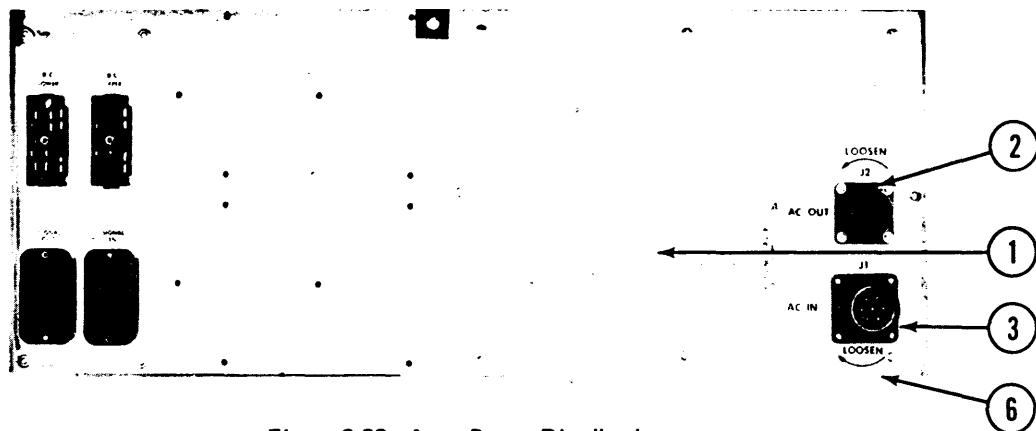


Figure 2-22. Assy, Power Distribution,
Front View

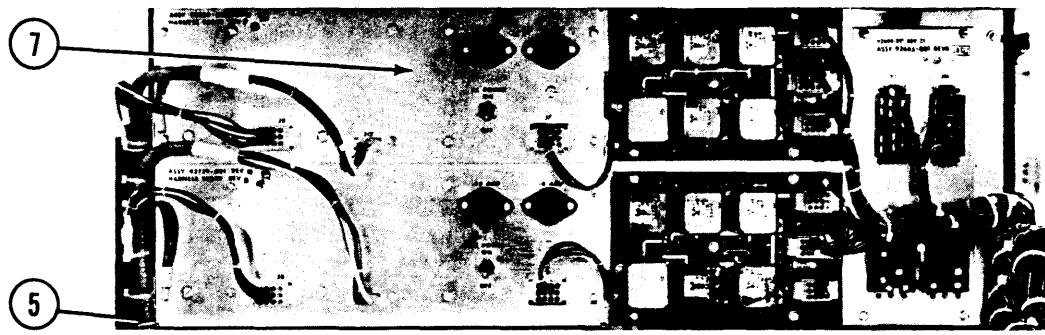


Figure 2-23. Assy, Power Distribution,
Rear View

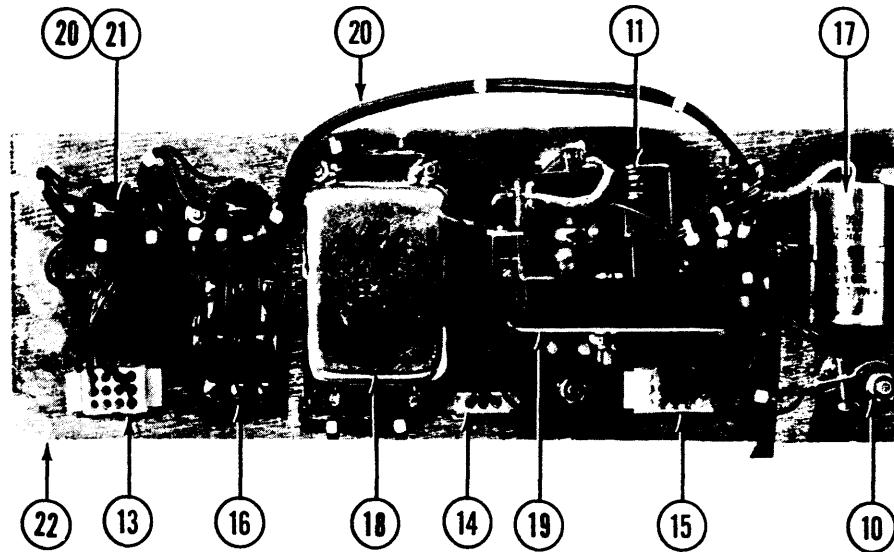


Figure 2-24. Assy, Ac Distribution Panel,
Detail

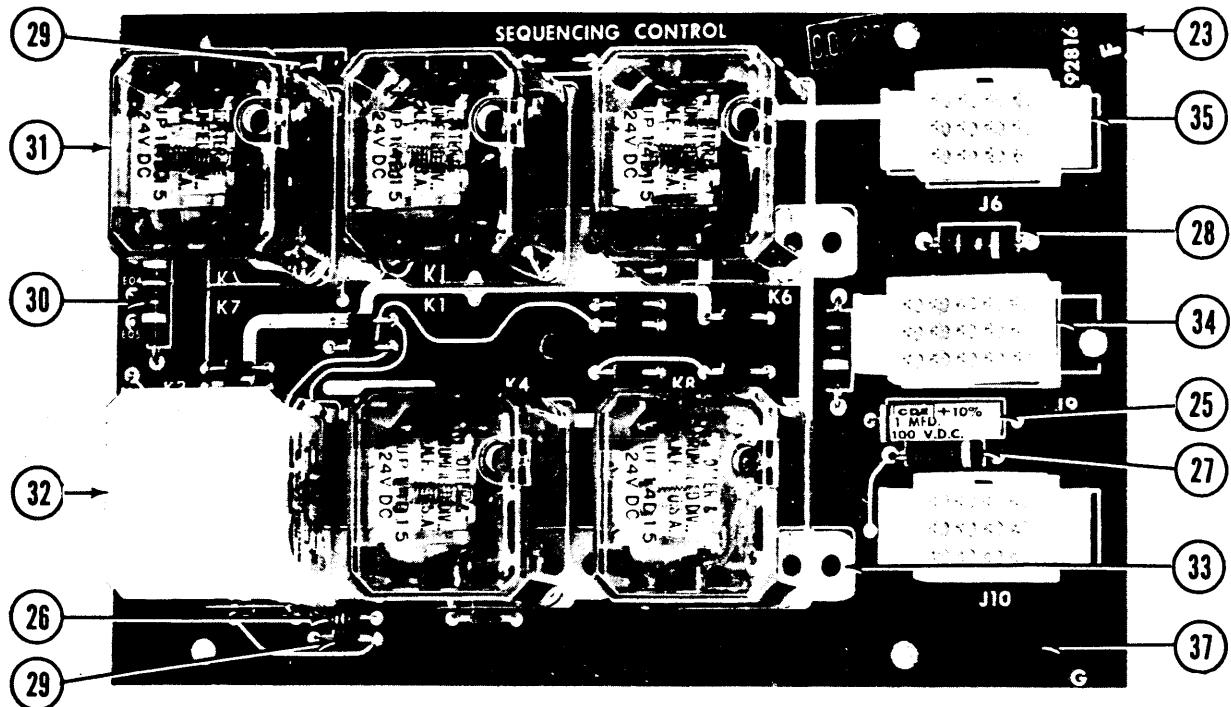


Figure 2-25. Assy, PWB, Sequencing Control

Item	Part Number	Description	Figure
1	96200-001	Assy, Power Distribution	22
2	90413-001	Connector, J2	22
3	90415-001	Connector, J1	22
4	90471-007	Term. Block, TB1, TB2	N/I
5	92725-001	Chassis, Pwr Distribution	23
6	96369-001	Panel, Support	22
7	96339-001	Assy, Ac Distribution Panel	23
8	90344-001	Diode, CR1, CR2	N/I
9	90365-392	Resistor, 1/4w, 5%, 3.9K	N/I
10	90373-001	Resistor, Adj. 2 ohm, 75w, R1	24
11	93082-001	Relay	24
12	90439-008	Terminal Strip	N/I
13	90605-012	Conn. Plug, J7	24
14	90606-003	Conn. J12	24
15	90606-015	Conn. Receptacle, J8	24
16	90998-001	Switch, 3 PDT, S1	24
17	91839-615	Capacitor, 500Mf, 100V, C1	24
18	93016-001	Filter, RFI	24
19	93051-001	Mount, Relay	24
20	93142-010	Fuse, Slow-Blow, F1, F2	24
21	93143-001	Holder, Fuse	24
22	96361-001	Panel, Component Mtg	24

Item	Part Number	Description	Figure
23	94826-001	Assy, PWB, Sequencing Control	25
24	90344-001	Diode, Medium Current, CR1-CR14	25
25	90355-104	Capacitor, Mylar, .01MF	25
26	90364-154	Resistor, $\frac{1}{4}$ w, 5%, 150K, R2	25
27	90365-100	Resistor, 1W, 5%, 10 ohms, R6	25
28	90365-271	Resistor, 1w, 5%, 270 ohms, R1, R4	25
29	90365-221	Resistor, 1w, 5%, 200 ohms, R3	25
30	90365-392	Resistor, 1w, 5%, 3.9K, R5	25
31	90380-001	Relay, Adj, Time Delay, K3	25
32	90381-001	Relay, 3 PDT, K1, K4, K6, K7, K8	25
33	90410-002	Socket, Relay	25
34	90605-012	Conn. Plug, J9	25
35	90605-015	Conn. Plug, J6, J10	25
36	90606-012	Conn. Receptacle, P7	25
37	94827-001	Board, PW, Sequencing Control	25

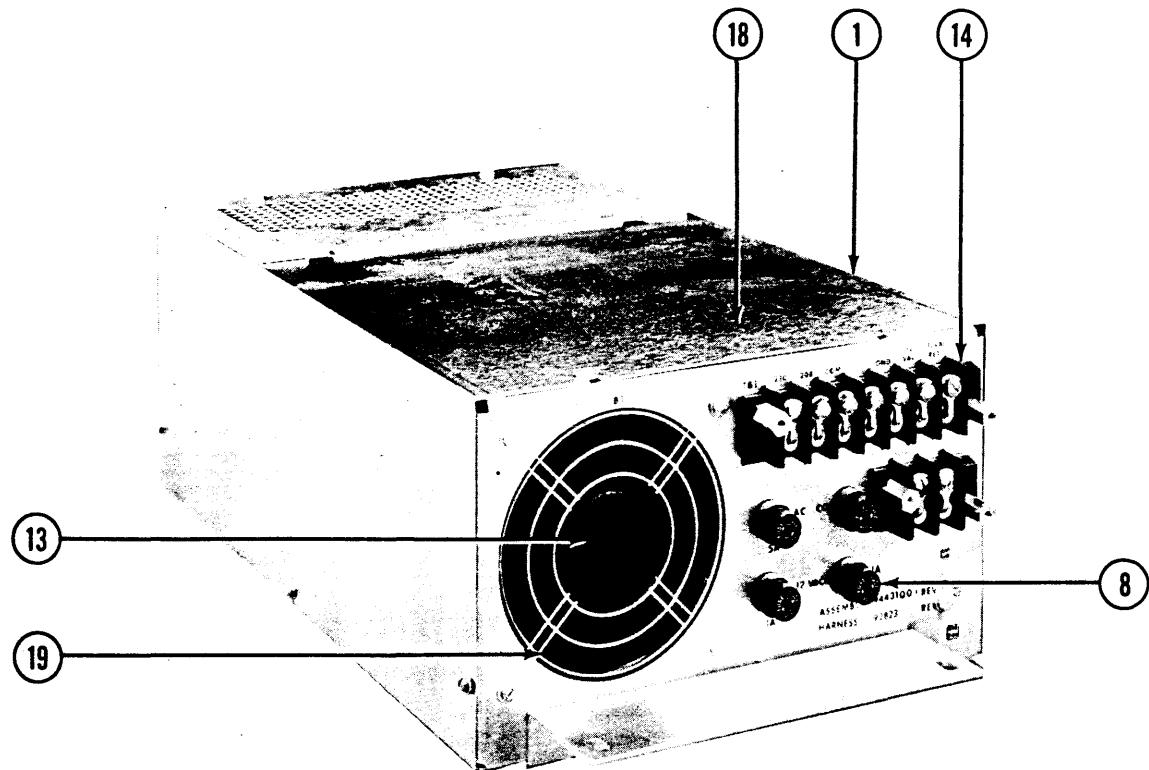


Figure 2-26. Assy, Power Supply

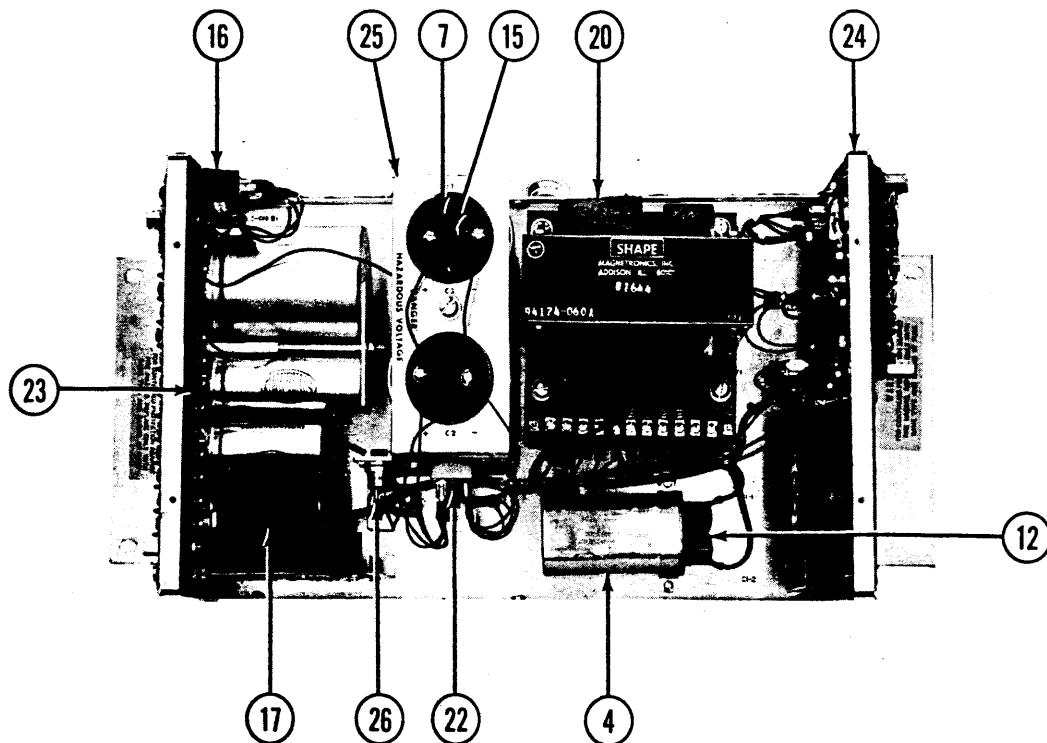


Figure 2-27. Assy, Power Supply,
Detail

Item	Part Number	Description	Figure
1	94431-001	Assy, Power Supply, 60 Hz	26
2	94431-002	Assy, Power Supply, 50 Hz (Option)	N/I
3	90356-004	Capacitor, Tantalum, 33Mf, 10V, C13	N/I
4	90357-310	Capacitor, Paper Oil, Tuning, 60 Hz	27
5	90357-312	Capacitor, Paper Oil, Tuning, 50 Hz (Option)	N/I
6	90364-101	Resistor, 1/4w, 5%, 100 ohms, R22	N/I
7	90365-512	Resistor, 1w, 5%, 5.1K, R1	27
8	90436-002	Holder, Fuse F1, 2, 6	26
9	90437-001	Fuse, 1A, F2, 3, 4, 6	N/I
10	90437-004	Fuse, 4A, F5	N/I
11	90437-005	Fuse, 5A, F1	N/I
12	90775-001	Cap, Capacitor	27
13	91593-001	Fan	26
14	91602-001	Block, Term. TB1	26
15	91810-757	Capacitor, 24,000Mf, 75V, C2, C3	27
16	91977-015	Circuit Breaker, Mag. CB1	27
17*	92639-001	Assy, Regulator Model VP11	27
18	92718-001	Cover, Power Supply	26
19	92720-001	Guard, Fan	26
20	94174-060	Transformer, 60 Hz	27
21	94174-050	Transformer, 50 Hz (Option)	N/I
22	94324-001	Rectifier, Bridge, CR1, CR4	27
23**	94415-001	Assy, PWB, Power Supply	27
24	94432-001	Chassis, Power Supply	27
25	94434-001	Bracket, Capacitor Mtg	27
26	95336-001	Thyristor (SCR) Medium Current, Q7	27

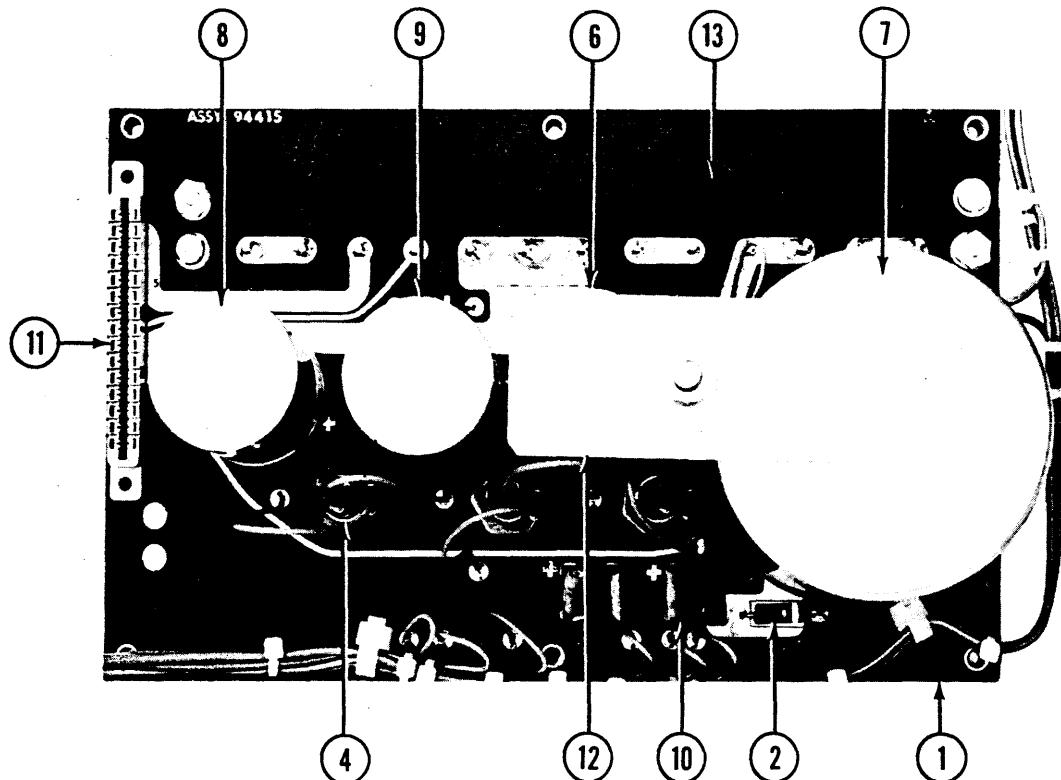


Figure 2-28. Assy, PWB, Power Supply

Item	Part Number	Description	Figure
1	94415-001	Assy, PWB, Power Supply	
2	90365-102	Resistor, 1w, 5%, 1K, R4	
3	90365-202	Resistor, 1w, 5%, 2K, R2, R3	N/I
4	90436-002	Holder, Fuse, F3, 4, 5	
5	91602-013	Block, Terminal	N/I
6	91810-152	Capacitor, 16,000 Mf, C6	
7	91810-307	Capacitor, 43,000 Mf, C4	
8	91810-503	Capacitor, 4,300 Mf, C5	
9	91810-504	Capacitor, 4,700 Mf, C9	
10	92655-002	Rectifier, Bridge, CR2, 3	
11	92752-015	Conn. PW 15 Term	
12	92753-001	Bracket, Capacitor Mtg	
13	94416-001	Board, PW, Power Supply	

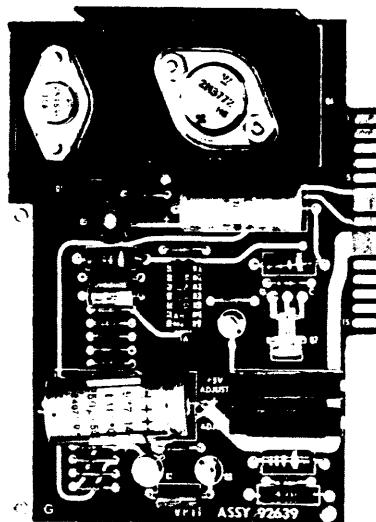


Figure 2-29. Assy, Regulator Module, VP11

Item	Part Number	Description
1	92639-001	Assy Regulator Module, VP11
2	92640-001	Board, PW Regulator Module
3	90378-002	Heat Sink, Q5
4	92756-001	Heat Sink, T0-3, Q4
5	92819-001	Heat Sink, T0-66, Q1
A1	90320-001	Amplifier, Operational
C7	90354-121	Capacitor, MICA, 120 Pf
C8	91839-507	Capacitor, 250 Mf, 50V
C10	90354-121	Capacitor, MICA 120 Pf
C11	90355-102	Capacitor, Mylar, .001 Mf
C12	91839-152	Capacitor, 250 Mf, 15V
C13	90355-104	Capacitor, Mylar .1 Mf
CR5	90346-062	Diode, Zener, 6.2V
CR6	90344-001	Diode, Medium Current
CR7	90346-062	Diode, Zener, 6.2V
CR8	90344-001	Diode, Medium Current
L1	90376-130	Inductor, 130 UH
Q1	90337-001	Transistor, PNP
Q2	90327-001	Transistor, PNP
Q3	90327-001	Transistor, PNP
Q4	90336-001	Transistor, NPN
Q5	90338-001	Transistor, NPN
Q6	90327-001	Transistor, PNP
Q7	94210-001	Thyristor (SCR)
R5	90366-324	Resistor, 3w, 5%, 4.7 ohms
R6	90364-102	Resistor, 1/4w, 5%, 1K
R7	90365-152	Resistor, 1w, 5%, 1.5K

Item	Part Number	Description
R8	90364-101	Resistor, 1/4w, 5%, 100 ohms
R9	90367-299	Resistor, 1/8w, 1%, 3.83K
R10	90368-501	Resistor, Variable, 500 ohms
R11	90367-159	Resistor, 1/8w, 1%, 1.47K
R12	90365-102	Resistor, 1w, 5%, 1K
R13	90367-339	Resistor, 1/8w, 1%, 51.1 ohms
R14	90368-501	Resistor, Variable, 500 ohms
R15	90367-131	Resistor, 1/8w, 1%, 1.21K
R16	90364-510	Resistor, 1/4w, 5%, 51 ohms
R17	90364-472	Resistor, 1/4w, 5%, 4.7K
R18	90364-103	Resistor, 1/4w, 5%, 10K
R19	90364-151	Resistor, 1/4w, 5%, 150 ohms
R20	90364-102	Resistor, 1/4w, 5%, 1K
R21	90365-101	Resistor, 1w, 5%, 100 ohms

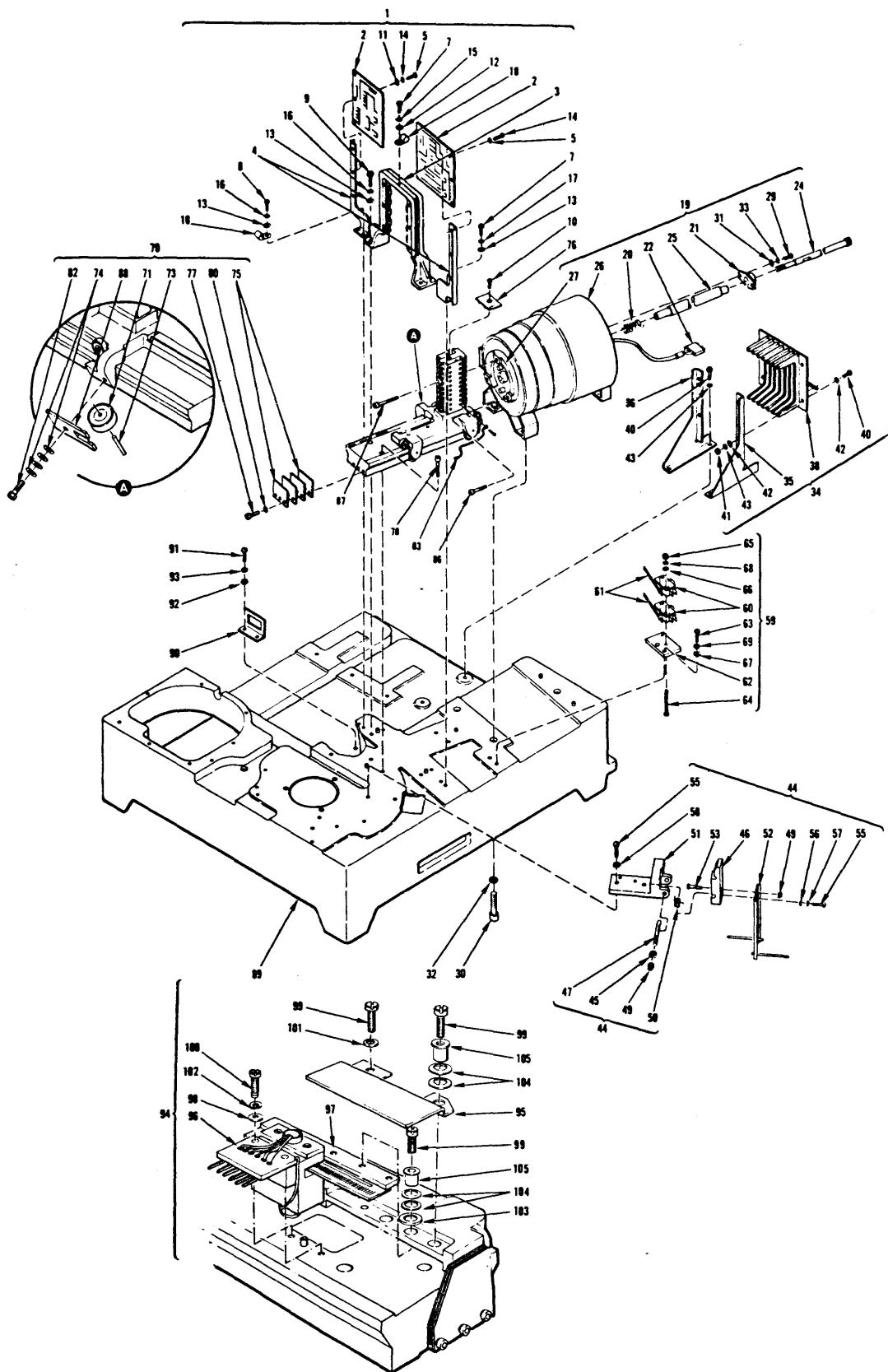


Figure 2-30. Baseplate, Topside Components, 1 of 2

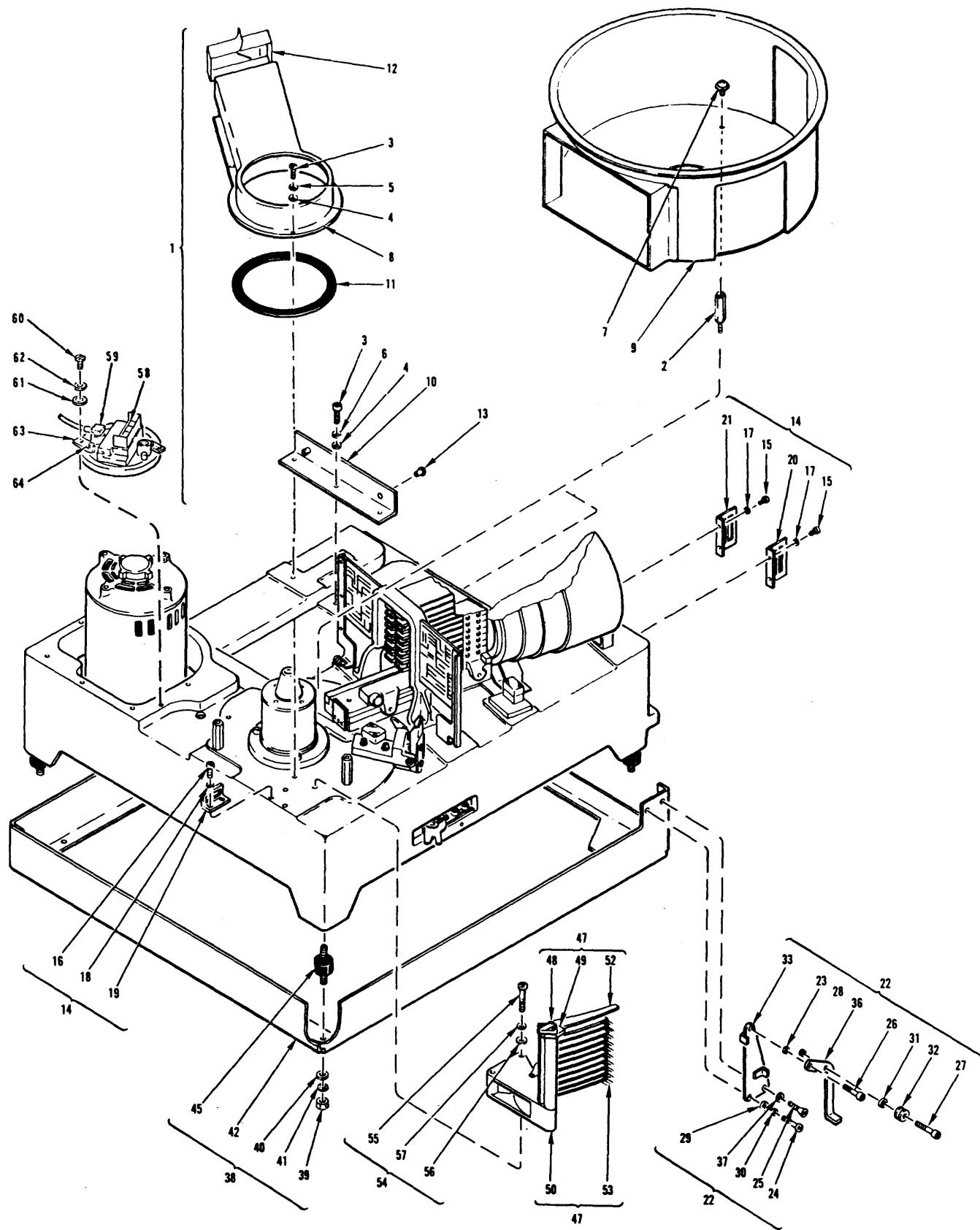
Item	Part Number	Description
1	Cam Tower and Preamp Group	
2*	93605-001	Assy, Preamp
3	91166-002	Assy, Cam Tower
4	92784-001	Bracket, Preamp Mtg
	Attaching Hardware	
5	90448-008	Screw, PHMS No. 4-40 x 5/16
6	90448-030	Screw, PHMS No. 8-32 x 7/16
7	90448-036	Screw, PHMS No. 8-32 x 7/8
8	90448-044	Screw, PHMS NO. 10-32 x 1/2
9	90448-047	Screw, PHMS No. 10-32 x 3/4
10	90484-036	Screw, Flat Head No. 8-32 x 3/8
11	90488-003	Washer, Flat No. 4
12	90488-005	Washer, Flat No. 8
13	90488-006	Washer, Flat No. 10
14	90489-002	Washer, Split Lock, No. 4
15	90489-004	Washer, Split Lock, No. 8
16	90489-005	Washer, Split Lock, No. 10
17	90490-004	Lockwasher, Int Tooth, No. 8
18	90774-002	Cable Clamp
	Linear Motor/Tachometer Group	
19	90030-001	Spring, Compression
20	90402-001	Retainer LV Syn
21	90606-004	Conn, 4 Pin
22	91490-001	Tachometer Assy, (Items 24, 25)
23	91490-002	Core and Pushrod Only
24	91490-003	Coil Housing Only
25	94420-001	Linear Motor. Includes Items 27, 28
26	94420-002	Bobbin Assy
27	94420-003	Conductor Band
	Attaching Hardware	
28	90448-020	Screw, PHMS No. 6-32 x 1/2
29	90449-054	Screw, Cap, Socket Head, No. 3/8-16 x 1
30	90488-004	Washer, Flat No. 6
31	90489-008	Washer, Split Lock, 3/8
32	90490-003	Lockwasher, Int Tooth No. 6
	Read/Write Electronics Connector Plate Group	
33	90212-001	Bracket, Conn. Plate Mtg, Right-hand
34	90212-002	Bracket, Conn. Plate Mtg, Left-hand
35	90739-007	Cable Clamp
36	93329-001	Assy, Connector Plate, Wired
	Attaching Hardware	
37	90448-044	Screw, PHMS No. 10-32 x 1/2
38	90487-006	Nut, Hex, No. 10-32
39	90488-006	Washer, Flat, No. 10
40	90490-005	Lockwasher, Int Tooth No. 10

Item	Part Number	Description
44		Sector Transducer Group
45	90048-009	Washer, Nylon
46	90064-002	Sector Transducer
47	90067-001	Screw, Sector Adj
48	90137-007	Nut, Self Locking
49	90487-004	Nut, Hex
50	91333-001	Spring, Sector Mtg
51	91335-001	Mount
52	92696-001	Bracket, Tilt
53	93557-316	Set Screw
		Attaching Hardware
54	90448-024	Screw, PHMS No. 6-32 x 3/4
55	90448-047	Screw, PHMS No. 10-32 x 3/4
56	90488-004	Washer, Flat, No. 6
57	90489-003	Washer, Split Lock, No. 6
58	90490-005	Lockwasher, Int Tooth, No. 10
		Heads Extended Micro Switch Group
60	90065-001	Switch, Micro
61	90087-001	Arm, Actuation
62	90498-001	Plate, Switch Mounting
		Attaching Hardware
63	90448-022	Screw, PHMS No. 6-32 x 5/8
64	90484-076	Screw, Flat Head, No. 4-40 x 1-1/4
65	90487-003	Nut, Hex, No. 4-40
66	90488-003	Washer, Flat, No. 4
67	90488-004	Washer, Flat, No. 6
68	90489-002	Washer, Split Lock, No. 4
69	90490-003	Lockwasher, Int. Tooth No. 6
70	94462-001	Assy, Carriage and Way, Matched
71	90047-002	Bearing, Radial
72	90047-004	Bearing, Radial
73	90051-001	Roller
74	90053-001	Washer, Spring, Roller Guide
75	90086-001	Spring, Carriage Stop
76	90091-001	Clamp Support
77	90449-027	Screw, Cap, Socket Head No. 10-32 x 1/2
78	90449-032	Screw, Cap, Socket Head No. 10-32 x 1-1/4
79	90484-036	Screw, Flat Head, No. 8-32 x 3/8
80	90489-005	Washer, Split Lock, No. 10
81	90748-002	Retaining Ring
82	90776-001	Screw
83	90940-001	Wire, Jumper Ground
84	91001-001	Clamp, Head
85	91488-001	Screw, Head Mtg No. 4-40 x 5/8
86	91488-002	Screw, Cap, Socket Head, No. 6-32 x 5/8
87	91488-003	Screw, Cap, Socket Head, No. 6-32 x 1-1/2
88	94584-001	Assy, Roller Guide

Item	Part Number	Description
89	92671-002	Assy, Baseplate and Dowel Pin
90	92691-001	Bracket, Conn. 15 Pin
		Attaching Hardware
91	90448-023	Screw, PHMS No. 8-32 x 5/16
92	90488-005	Washer, Flat No. 8
93	90490-004	Washer, Lock No. 8
		Optical Transducer Group
94	94519-001	Shield, Horizontal Mtg
95	94523-001	Assy, Light and Photocell
96	94524-001	Assy, Scale and Mount
		Attaching Hardware
97	90048-023	Washer, Flat, No. 4
98	90448-010	Screw, Pan Head 4-40 x .437
99	90448-013	Screw, Pan Head 4-40 x 5/8
100	90488-003	Washer, Plain No. 4
101	90489-002	Lockwasher, Split No. 4
102	94579-001	Washer, Flat
103	94580-001	Washer, Spring
104	94581-001	Spacer
		Temperature Compensation Component Group
105	96158-001	Assy, Thermistor Kit, TH1, TH2, TH3
106	96171-001	Housing, Thermistor
107	95353-001	Fitting, Thermistor Mtg
108	95013-001	Thermistor (TH1, 2, 3)
		Attaching Hardware
109	96172-001	Bracket, Mtg
110	90448-009	Screw, PHMS, 4-40 x 3/8
111	90488-003	Washer, Plain, No. 4
112	90489-002	Lockwasher, Split, No. 4

*Component breakdown, see PWB Component Section.

NOTE: The carriage and way are matched assemblies and must be replaced as an assembly.



Item	Part Number	Description
1		Air Supply Component Group
2	90067-003	Standoff
3	90448-044	Screw, PHMS. No. 10-32 x 3/8
4	90488-006	Washer, Flat, No. 10
5	90489-005	Lockwasher, Split, No. 10
6	90490-005	Washer, Lock, No. 10
7	90567-004	Screw, Truss Head Philips, No. 10-32 x 3/8
8	92687-001	Duct, Air
9	92688-001	Air Shroud
10	92787-001	Bracket, Air Supply Mtg
11	92798-001	Gasket, Air Duct
12	92795-002	Tape, Adhesive Backed
13	93040-001	Fastener, Tubular
14		Connector Mounting Brackets
15	90448-028	Screw, PHMS. No. 8-32 x 5/16
16	90448-044	Screw, PHMS. No. 10-32 x 1/2
17	90490-004	Washer, Lock, Int. Tooth No. 8
18	90490-005	Washer, Lock, Int. Tooth No. 10
19	91332-001	Bracket, Conn. Mtg
20	92890-001	Bracket, Conn. Mtg
21	93132-001	Bracket, Conn. Mtg
22		Drawer Latch Group
23	90048-009	Washer, Nylon
24	90448-028	Screw No. 8-32 x 5/16
25	90484-036	Screw, Flathead, No. 8-32 x 5/8
26	90486-019	Screw, Shoulder, No. 10-32
27	90486-021	Screw, Shoulder, No. 10-32
28	90487-006	Nut, Hex No. 10-32
29	90488-005	Washer, Flat, No. 8
30	90490-004	Washer, Lock, Int. Tooth No. 8
31	92638-001	Spacer, Lever
32	92713-001	Pulley, Nylon
33	92888-001	Support, Lever, Right-hand
34	92888-002	Support, Lever, Left-hand
35	92912-001	Lever, Left-hand
36	92912-002	Lever, Right-hand
37	93557-008	Washer, Lock, Ext. Tooth No. 8

Item	Part Number	Description	Figure
38		Baseplate Mounting Group	
39	90487-010	Nut, Hex, No. 5/16-18	
40	90488-012	Washer, Flat, 5/16	
41	90489-007	Lockwasher, 5/16	
42	92863-001	Frame, Baseplate Mtg	
43	94167-001	Stud, Isolation Mount	N/I
44	94168-001	Block, Alum, Isolation Mount	N/I
45	94169-001	Block, Isolation Mount	
46	94527-001	Guard, Belt	N/I
47	91527-001	Assy, Brush Drive	
48	90065-001	Switch, Micro	
49	91014-001	Brush Drive Cap	
50	91153-001	Mount, Brush Drive	
51	91528-001	Brush Drive Motor	N/I
52	91530-001	Brush Holder	
53	93008-001	Brush	
54		Attaching Hardware	
55	90448-052	Screw, PHMS No. 10-32 x 1-3/4	
56	90488-006	Washer, Flat, No. 10	
57	90489-005	Lockwasher, Split, No. 10	

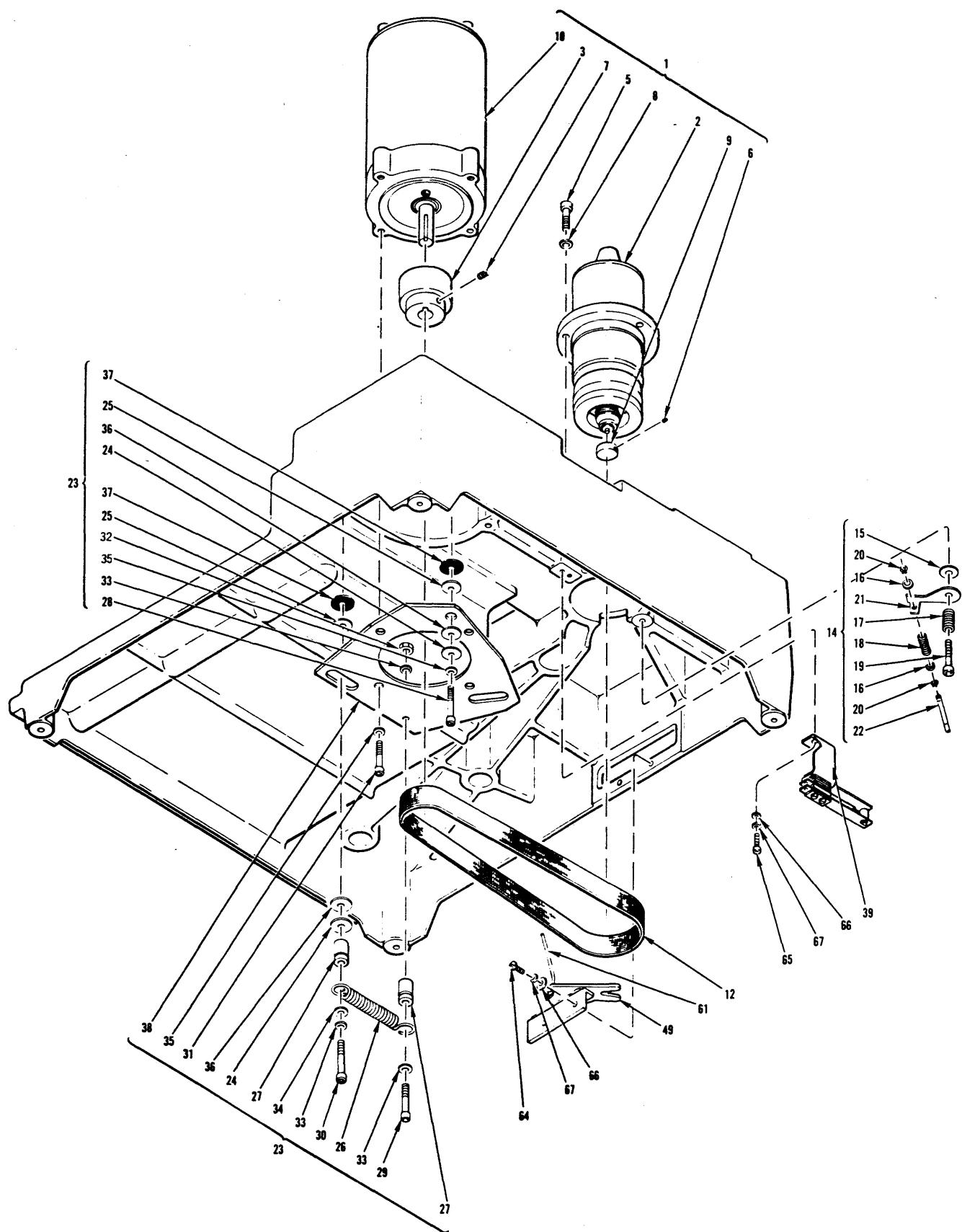


Figure 2-32. Baseplate, Underside Components

Item	Part Number	Description	Figure
1	Spindle Drive Group		
2	90001-001	Spindle Assy	
3	90076-001	Pulley, 60 Hz	
4	90076-002	Pulley, 50 Hz	N/I
5	90449-100	Screw, Cap, 5/16-18 x 1	
6	90482-008	Setscrew	
7	90482-048	Setscrew	
8	90489-007	Lockwasher, 5/16	
9	91535-001	Brush, Spindle Grounding	
10	93030-001	Motor, Drive, 50/60 Hz	
11	93030-002	Motor, Drive, 60 Hz	N/I
12	95304-001	Belt, Spindle Drive 60 Hz	
13	95304-002	Belt Spindle Drive 50 Hz	N/I
14	Spindle Brake Group		
15	90048-004	Washer, Nylon, 3/4	
16	90048-008	Washer, Nylon, .270	
17	90097-001	Spring, Compression	
18	90131-001	Spring, Compression	
19	90485-012	Screw, Shoulder	
20	90748-003	Ring, Retaining	
21	91177-001	Arm, Spindle Locking	
22	92693-001	Rod, Actuator	
23	Motor Mounting Group		
24	90048-007	Washer, Steel, 1"	
25	90048-017	Washer, Nylon, 1"	
26	90078-001	Spring, Tension	
27	90081-001	Support, Spring	
28	90449-042	Screw, Cap, Socket Head, 1/4-20 x 1-1/4	
29	90449-044	Screw, Cap, Socket Head, 1/4-20 x 1-3/4	
30	90449-046	Screw, Cap, Socket Head, 1/4-20 x 2-1/4	
31	90449-052	Screw, Cap, Socket Head, 3/8-16 x 3/4	
32	90487-007	Nut, Hex, 1/4-20	
33	90488-008	Lockwasher, 1/4	
34	90489-006	Lockwasher, Split, 1/4	
35	90489-008	Lockwasher, Split, 3/8	
36	92574-001	Washer, Insulator	
37	92575-001	Washer, Spring	
38	92690-001	Plate, Motor Mtg	
39	90935-001	Assy, Pack Switch	
40	90553-004	Retainer, Push-On	N/I
41	90749-001	Spacer	N/I
42	90750-001	Insulator	N/I
43	90753-001	Button	N/I
44	90755-001	Spring Arm	N/I
45	90756-001	Bracket	N/I
46	90768-001	Fixed Contact Arm	N/I
47	90769-001	Spring Contact Arm	N/I
48	90841-001	Connector Lug	N/I

Item	Part Number	Description	Figure
49	92694-001	Assy, Cam and Cam Follower	
50	90486-006	Screw, Shoulder, Precision	N/I
51	90488-004	Washer, Flat No. 6	N/I
52	90488-005	Washer, Flat No. 8	N/I
53	90488-006	Washer, Flat No. 10	N/I
54	90748-003	Ring, Retaining	N/I
55	90748-005	Ring, Retaining	N/I
56	92692-001	Cam	N/I
57	92706-001	Roller	N/I
58	92707-001	Slide	N/I
59	92708-001	Spacer, Cam	N/I
60	92781-003	Spring, Tension	N/I
61	92783-001	Push Rod, Cam	
62	92802-001	Assy, Cam Bracket	N/I
63	93719-001	Ring, Retaining, External	N/I
Attaching Hardware			
64	90048-047	Screw, PHMS No. 10-32 x 3/4	
65	90449-027	Screw, Cap, Socket Head, No. 10-32 x 1/2	
66	90488-006	Washer, Flat No.	
67	90490-005	Washer, Flock, Int. Tooth No. 10	

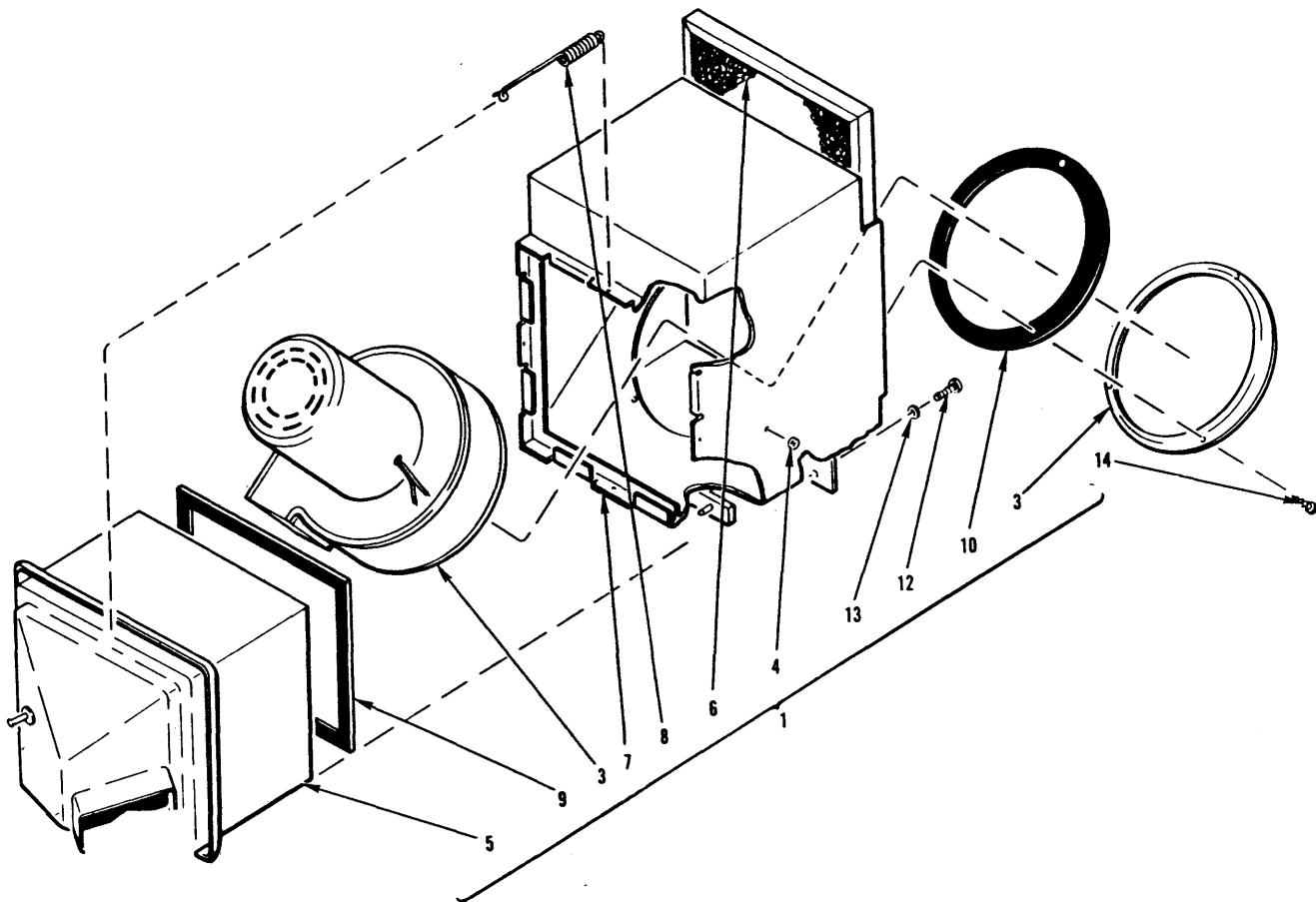


Figure 2-33. Assy, Air Supply

Item	Part Number	Description	Figure
1	92668-001	Assy, Air Supply	
2*	90605-004	Conn. Plug	N/I
3*	91771-004	Blower, Squirrel Cage	
4*	92626-002	Grommet	
5	92669-001	Assy, Absolute Filter	
6	92697-001	Pre-Filter	
7*	92698-001	Weldment, Motor Can	
8	92701-001	Spring, Shroud	
9	92702-001	Gasket, Air Supply	
10*	93451-001	Gasket, Blower Inlet	
11	94310-001	Assy, Blower. Includes Items*	N/I
	Attaching Hardware		
12	90448-044	Screw, PHMS No. 10-32 x 3/8	
13	90490-006	Washer, Lock, No. 10	
14	90689-061	Screw, Sheet Metal No. 6 x 3/8	

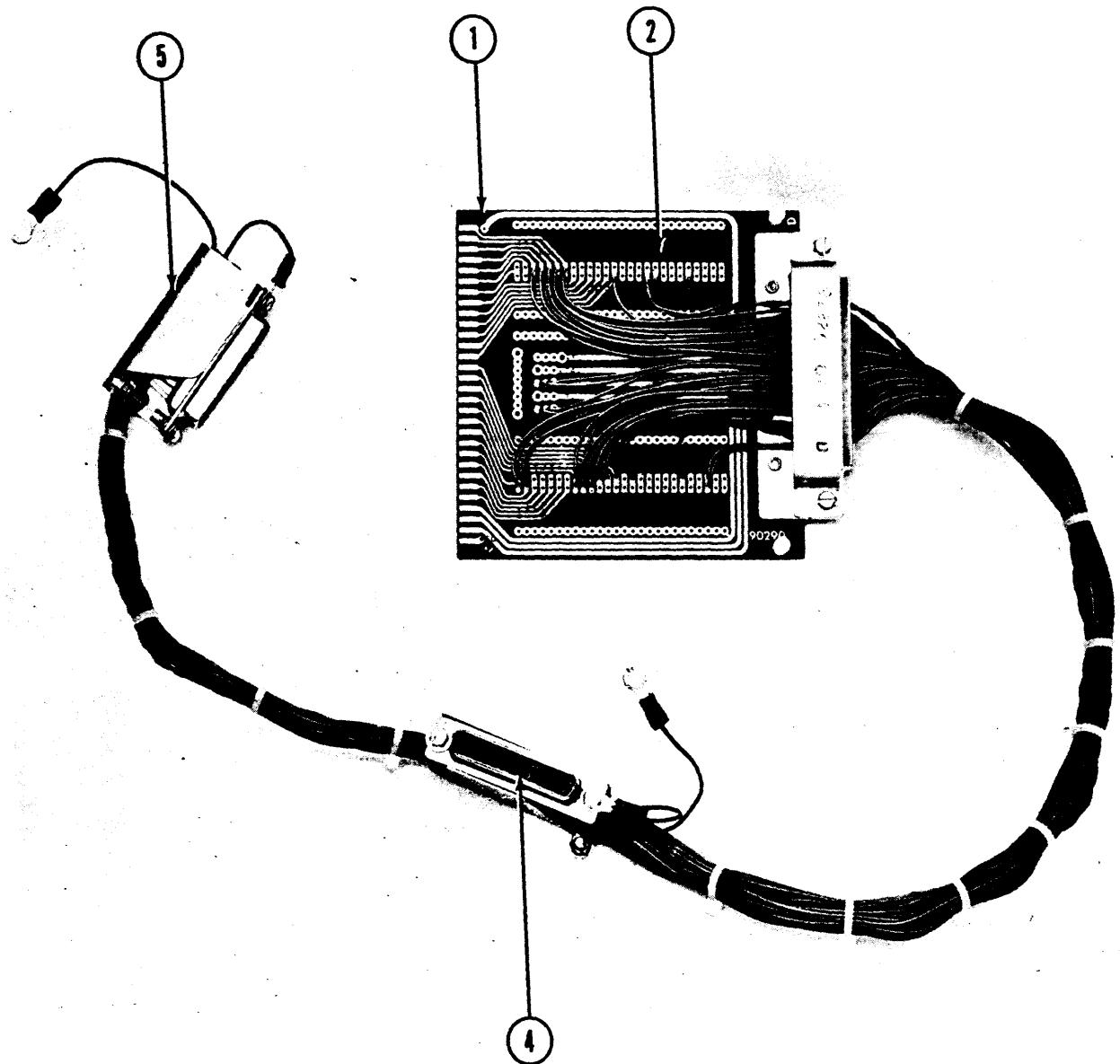


Figure 2-34. Assy, Cable Preamplifier and Head Select

Item	Part Number	Description
1	96175-001	Assy, Cable, Preamplifier
2	90290-001	Assy, Cable Plug, P01C
3	90360-022	Capacitor, .22MF, C1
4	90573-025	Conn. 25 Pin, P11A, P11B
5	90574-025	Conn. Junction Shell P11A, P11B

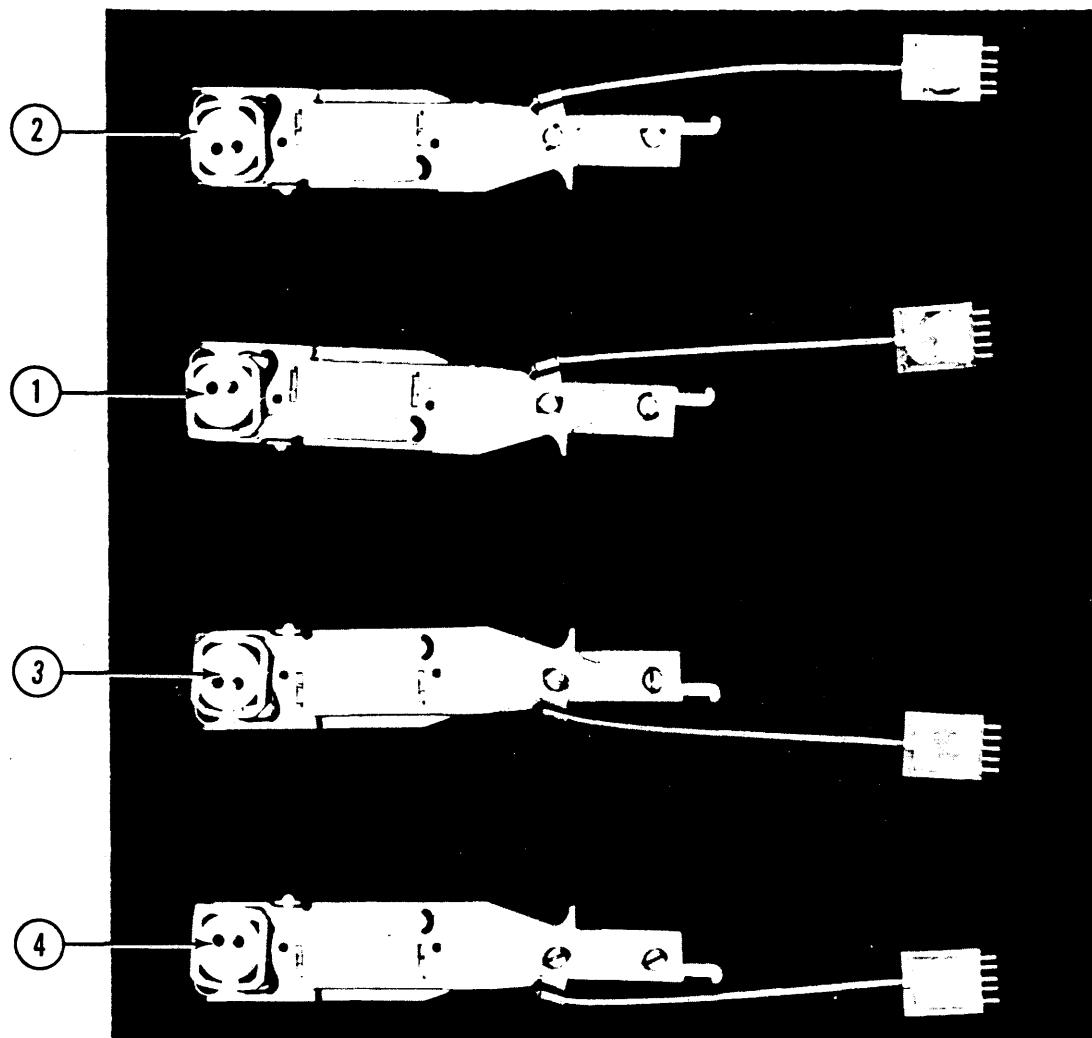


Figure 2-35. Read/Write Heads

Item	Part Number	Description
1	93435-001	Assy, Head A Down
2	93435-002	Assy, Head B Up
3	93435-003	Assy, Head A Up
4	93435-004	Assy, Head B Down

SECTION 3

COMPONENT BOARD BREAKDOWN

GENERAL

This section provides the illustrations and assembly parts list for all plug-in modules used in the disk drive. The modules are presented in assembly part number order.

Line illustrations of the component board layouts are used. The illustrations identify the electronic

components by reference designator and location. All items of the modules are listed by reference designator in alpha-numeric order.

MODULE LOCATION LIST

The following list provides the module location, by row and slot, part number, module designator, and description.

Circuit Boards by Location

Location	Part Number	Module Designator	Description	Figure
A Row Modules				
A01	90290	AN12	Cable Plug Module	3-8
A02	94706	AR29	Crossover Detector	3-28
A03	90258	AL12	Index, Speed and Cylinder Detector	3-7
A04	90202	AF10	Cylinder Address Register	3-1
A05	91069	AF13	Head Address and Decode	3-12
A06	91855	AL17	9 Bit Subtractor	3-16
A07	90246	AL11	Control Logic I	3-6
A08	94014	AL30	Difference Counter and Illegal	3-21
A09	90206	AF11	Difference Counter	3-2
A10	90222	AL13	Seek Logic I	3-4
A11	90226	AL14	Seek Logic II	3-5
A12	91852	AP12	D-A Converter	3-15
A13	94478	AP43	Servo Control Amplifier	3-24
A14	95086	AP46	Servo Driver	3-31
A15	90559	AP14	Servo Amplifier	3-9
B Row Modules				
B01	90290	AN12	Cable Plug Module	3-8
B02	90290	AN12	Cable Plug Module	3-8
B03	90970	AN19	5V Receiver	3-11
B04	90966	AN18	5V Driver	3-10
B05	90966	AN18	5V Driver	3-10
B06	93463	AT16	Oscillator and Dc Power Monitor	3-19
B07	94742	AL44	Control Logic II	3-30
B08	90218	AL15	File Unsafe Logic	3-3
B09	94081	AP39	Lamp/Relay Driver	3-23
B10	92616	AP31	Lamp Display Board or 2010A Disk Drive Monitor (Optional Accessories)	
B11	91725	AL22	Sector Generator	3-14
B12	91089	AL19	Control Logic III	3-13
B13	94050	AL32	Control Logic IV	3-22
B14	94482	AT17	Time Delay	3-25
B15	93059	AP26	Regulator and Power Monitor	3-17

Location	Part Number	Module Designator	Description	Figure
C Row Modules				
C01	90290	AN12	Cable Plug Module	3-8
C02	94630	AR26	Read Amplifier	3-26
C03	94709	AR28	Write Driver	3-29
C04				
C05	94674	AX16	Temperature Compensation Network	3-27
C06	93161	AX15	Index and Cylinder Transducer Preamplifier	3-18
C07	90290	AN12	Cable Plug Module	3-8
Read Preamplifiers				
	93605	VR13	Read/Preamp/Head Select	

MODULE PART NUMBER LIST

The following list provides the module part number, in part number order, module designator, description and figure reference.

Circuit Boards by Assembly Number

Part Number	Module Designator	Description	Figure
90202	AF10	Cylinder Address Register	3-1
90206	AF11	Difference Counter	3-2
90218	AL15	File Unsafe Logic	3-3
90222	AL13	Seek Logic I	3-4
90226	AL14	Seek Logic II	3-5
90246	AL11	Control Logic I	3-6
90258	AL12	Index, Speed, and Cylinder Detector	3-7
90290	AN12	Cable Plug Module	3-8
90559	AP14	Servo Amplifier	3-9
90966	AN18	5V Driver	3-10
90970	AN19	5V Receiver	3-11
91069	AF13	Head Address and Decode	3-12
91089	AL19	Control Logic III	3-13
91725	AL22	Sector Generator	3-14
91852	AP12	D-A Converter	3-15
91855	AL17	9 Bit Subtractor	3-16
93059	AP26	Regulator and Power Monitor	3-17
93161	AX15	Index and Cylinder Transducer Preamplifier	3-18
93463	AT16	Oscillator and Dc Power Monitor	3-19
93605	VR13	Read Preamp and Head Select	3-20
94014	AL30	Difference Counter and Illegal Cylinder	3-21
94050	AL32	Control Logic IV	3-22
94081	AP39	Lamp/Relay Driver	3-23
94478	AP43	Servo Control Amplifier	3-24
94482	AT17	Time Delay	3-25
94630	AR26	Read Amplifier	3-26
94674	AX16	Temperature Compensation Network	3-27
94706	AR29	Crossover Detector	3-28
94709	AR28	Writer Driver	3-29
94742	AL44	Control Logic II	3-30
95086	AP46	Servo Driver	3-31

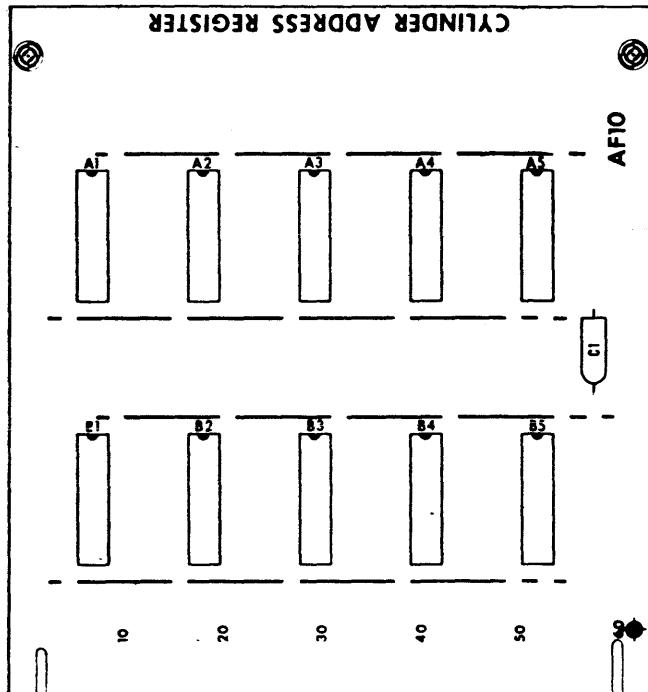


Figure 3-1. Assy, PWB, Cylinder Address Register, AF10

Item	Part Number	Description
1	90202-001	Assy, PWB, Cylinder Address Register
2	90203-001	Board, PW, Cylinder Address Register
A1	90310-001	Flip Flop, Clocked, DTL
A2	90310-001	Flip Flop, Clocked, DTL
A3	90310-001	Flip Flop, Clocked, DTL
A4	90310-001	Flip Flop, Clocked, DTL
A5	90314-001	Gate, Nand, Hex 1-Input, DTL
B1	90310-001	Flip Flop, Clocked, DTL
B2	90310-001	Flip Flop, Clocked, DTL
B3	90310-001	Flip Flop, Clocked, DTL
B4	90310-001	Flip Flop, Clocked, DTL
B5	90314-001	Gate, Nand, Hex 1-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf

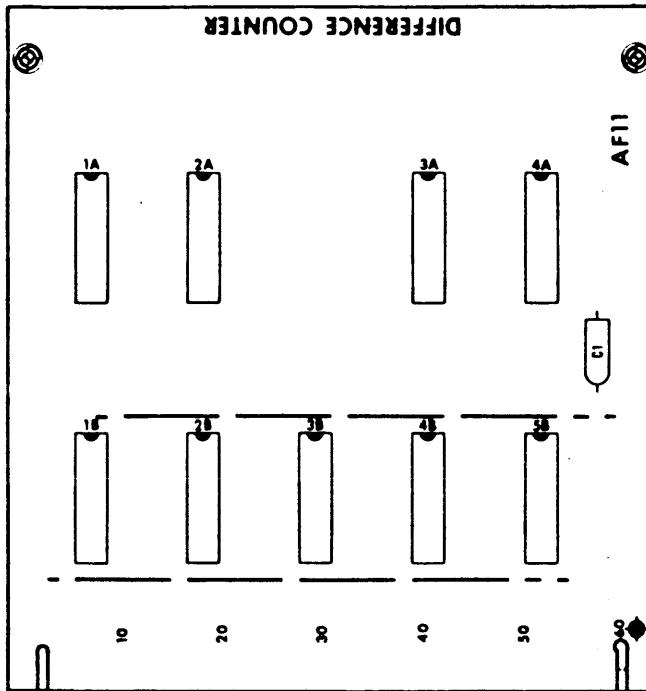


Figure 3-2. Assy, PWB, Difference Counter, AF11

Item	Part Number	Description
1	90206-001	Assy, PWB, Difference Counter
2	90207-001	Board, PW, Difference Counter
A1	90310-001	Flip Flop, Clocked, DTL
A2	90310-001	Flip Flop, Clocked, DTL
A3	90310-001	Flip Flop, Clocked, DTL
A4	90310-001	Flip Flop, Clocked, DTL
B1	90310-001	Flip Flop, Clocked, DTL
B2	90310-001	Flip Flop, Clocked, DTL
B3	90310-001	Flip Flop, Clocked, DTL
B4	90310-001	Flip Flop, Clocked, DTL
B5	90310-001	Flip Flop, Clocked, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf

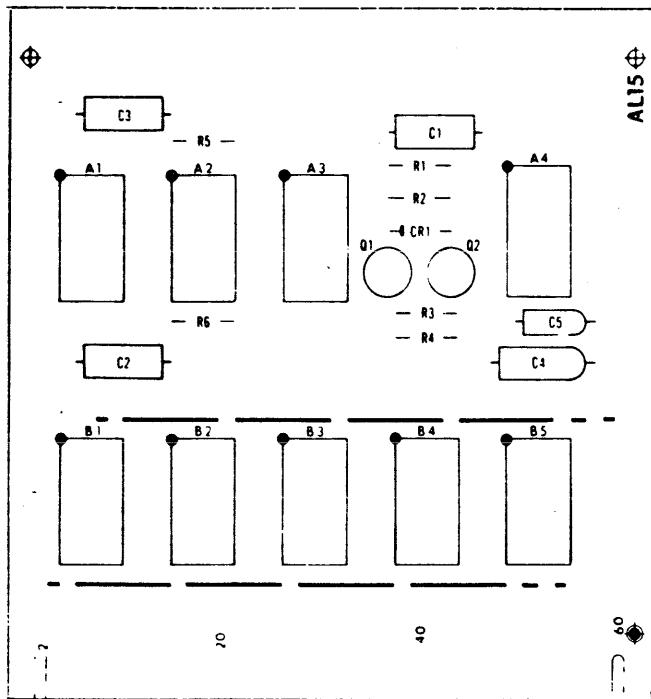


Figure 3-3. Assy, PWB, File Unsafe Logic, AL15

Item	Part Number	Description
1	90218-001	Assy, PWB, File Unsafe Logic
2	90219-001	Board, PW, File Unsafe Logic
3	90228-001	Insulator, Transistor
A1	90310-001	Flip Flop, Clocked, DTL
A2	90313-001	Gate, Nand, Dual, 4-Input, DTL
A3	90314-001	Gate, Nand, Hex, 1-Input, DTL
A4	92133-001	Latch, Quad
B1	90310-001	Flip Flop, Clocked, DTL
B2	90311-001	Gate, Nand, Quad, 2-Input, DTL
B3	90311-001	Gate, Nand, Quad, 2-Input, DTL
B4	93014-001	Gate, Nand, Hex, 1-Input, DTL
B5	90311-001	Gate, Nand, Quad, 2-Input, DTL
C1	90355-153	Capacitor, Mylar, .015Mf
C2	90355-472	Capacitor, Mylar, .0047Mf
C3	90355-472	Capacitor, Mylar, .0047Mf
C4	90356-002	Capacitor, Tantalum, 3.3Mf
C5	90356-001	Capacitor, Tantalum, 4.7Mf
CR1	90346-120	Diode, Zener, 12 Volt
Q1	90326-001	Transistor, NPN
Q2	90328-001	Transistor, NPN
R1	90364-341	Resistor, 1/8w, 1%, 5.11K
R2	90364-510	Resistor, 1/4w, 5%, 51 ohms
R3	90364-471	Resistor, 1/4w, 5%, 470 ohms
R4	90364-562	Resistor, 1/4w, 5%, 5.6K
R5	90364-102	Resistor, 1/4w, 5%, 1K
R6	90364-102	Resistor, 1/4w, 5%, 1K

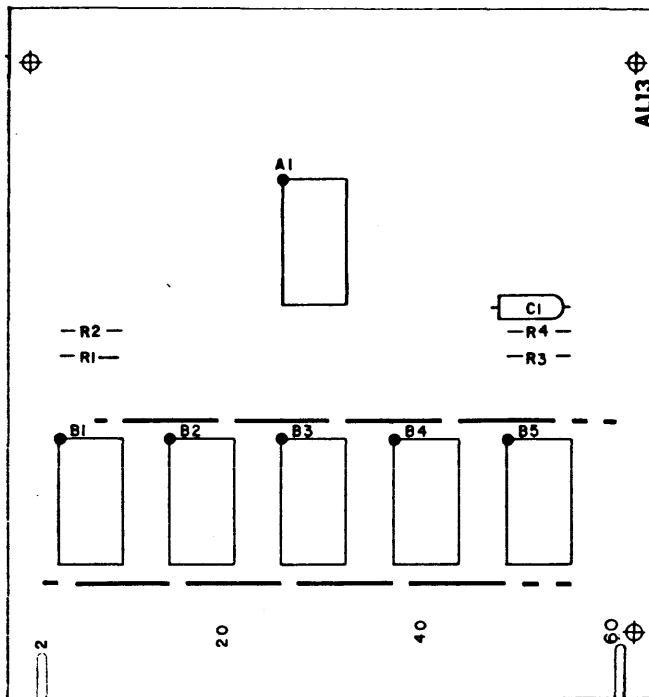


Figure 3-4. Assy, PWB, Seek Logic I, AL13

Item	Part Number	Description
1	90222-001	Assy, PWB, Seek Logic I
2	90223-001	Board, PW, Seek Logic I
A1	90314-001	Gate, Nand, Hex, 1-Input, DTL
B1	90312-001	Gate, Nand, Triple, 3-Input, DTL
B2	90311-001	Gate, Nand, Quad, 2-Input, DTL
B3	90310-001	Flip Flop, Clocked, DTL
B4	90310-001	Flip Flop, Clocked, DTL
B5	90311-001	Gate, Nand, Quad, 2-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
R1	90364-102	Resistor, 1/4w, 5%, 1K
R2	90364-102	Resistor, 1/4w, 5%, 1K
R3	90364-102	Resistor, 1/4w, 5%, 1K
R4	90364-102	Resistor, 1/4w, 5%, 1K

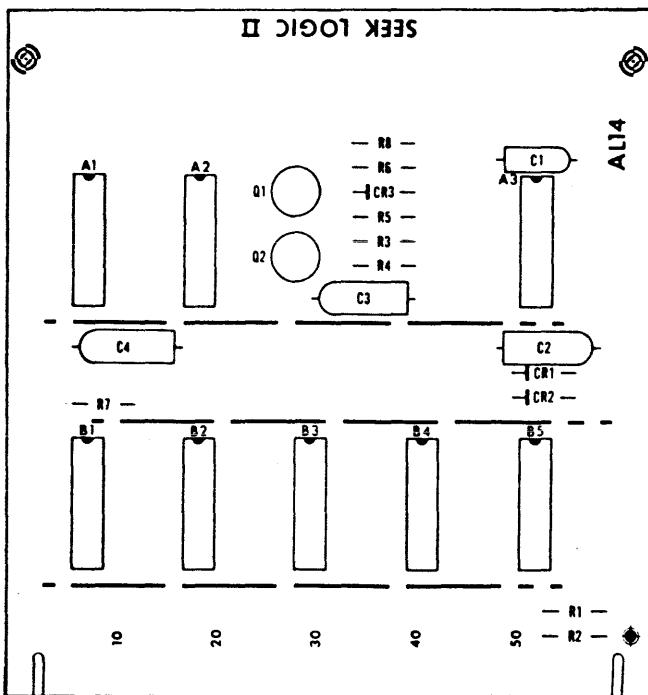


Figure 3-5. Assy, PWB, Seek Logic II, AL14

Item	Part Number	Description
1	90226-001	Assy, PWB, Seek Logic II
2	90227-001	Board, PW, Seek Logic II
3	90228-001	Insulator, Transistor, Q4, Q2
A1	90310-001	Flip Flop, Clocked, DTL
A2	90311-001	Gate, Nand, Quad, 2-Input, DTL
A3	90312-001	Gate, Nand, Triple, 3-Input, DTL
B1	90314-001	Gate, Nand, Hex, 1-Input, DTL
B2	90310-001	Flip Flop, Clocked, DTL
B3	90312-001	Gate, Nand, Quad, 2-Input, DTL
B4	90310-001	Flip Flop, Clocked, DTL
B5	90313-001	Gate, Nand, Dual, 4-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90356-002	Capacitor, Tantalum, 3.3Mf
C3	90356-002	Capacitor, Tantalum, 3.3Mf
C4	90356-004	Capacitor, Tantalum, 33Mf
CR1	90342-001	Diode, General Purpose
CR2	90342-001	Diode, General Purpose
CR3	90343-001	Diode, Low Capacitance
Q1	90327-001	Transistor, PNP
Q2	90326-001	Transistor, NPN
R1	90364-102	Resistor, 1/4w, 5%, 1K
R2	90364-102	Resistor, 1/4w, 5%, 1K
R3	90367-301	Resistor, 1/8w, 1%, 383K
R4	90364-512	Resistor, 1/4w, 5%, 5.1K
R5	90364-203	Resistor, 1/4w, 5%, 20K
R6	90364-303	Resistor, 1/4w, 5%, 30K
R7	90364-103	Resistor, 1/4w, 5%, 10K
R8	90364-471	Resistor, 1/4w, 5%, 470 ohms

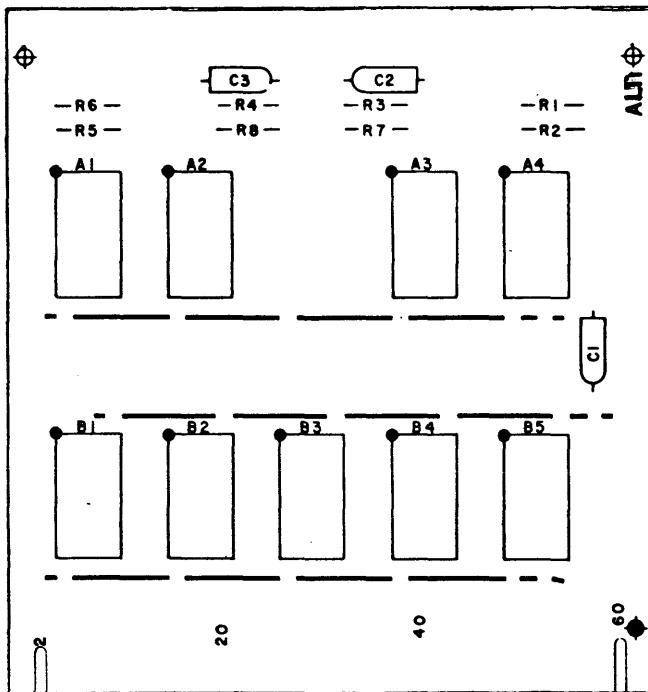


Figure 3-6. Assy, PWB, Control Logic II, AL11

Item	Part Number	Description
1	90246-000	Assy, PWB, Control Logic II
2	90247-001	Board, PW, Control Logic II
A1	90311-001	Gate, Nand, Quad, 2-Input, DTL
A2	90312-001	Gate, Nand, Triple, 3-Input, DTL
A3	90313-001	Gate, Nand, Dual, 4-Input, DTL
A4	90311-001	Gate, Nand, Quad, 2-Input, DTL
B1	90310-001	Flip Flop, Clocked, DTL
B2	90310-001	Flip Flop, Clocked, DTL
B3	90311-001	Gate, Nand, Quad, 2-Input, DTL
B4	90314-001	Gate, Nand, Hex, 1-Input, DTL
B5	90311-001	Gate, Nand, Quad, 2-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90356-001	Capacitor, Tantalum, 4.7Mf
C3	90356-001	Capacitor, Tantalum, 4.7Mf
R1	90364-102	Resistor, 1/4w, 5%, 1K
R2	90364-102	Resistor, 1/4w, 5%, 1K
R3	90364-103	Resistor, 1/4w, 5%, 10K
R4	90364-103	Resistor, 1/4w, 5%, 10K
R5	90364-102	Resistor, 1/4w, 5%, 1K
R6	90364-102	Resistor, 1/4w, 5%, 1K
R7	90364-510	Resistor, 1/4w, 5%, 51 ohms
R8	90364-510	Resistor, 1/4w, 5%, 51 ohms

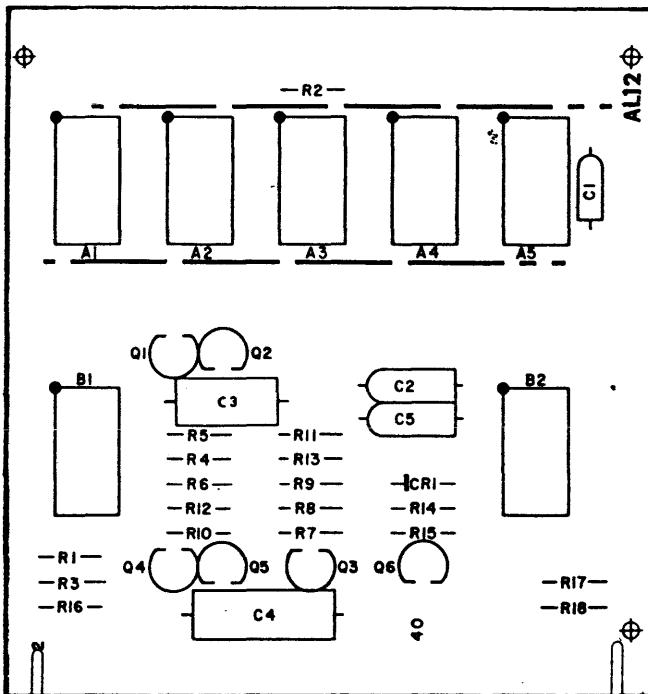


Figure 3-7. Assy, PWB, Detector, Index, Speed, and Cylinder, AL12

Item	Part Number	Description
1	90258-001	PWB, Detector, Index, Speed and Cylinder
2	90259-001	Board, PW, Detector, Index, Speed and Cylinder
3	90228-001	Insulator, Transistor
A1	90310-001	Flip Flop, Clocked, DTL
A2	90310-001	Flip Flop, Clocked, DTL
A3	90310-001	Flip Flop, Clocked, DTL
A4	90312-001	Gate, Nand, Triple, 3-Input, DTL
A5	90314-001	Gate, Nand, Hex, 1-Input, DTL
B1	90311-001	Gate, Nand, Quad, 2 Input, DTL
B2	90310-001	Flip Flop, Clocked, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90356-002	Capacitor, Tantalum, 3.3Mf
C3	90355-223	Capacitor, Mylar, .022MF
C4	90355-104	Capacitor, Mylar, .1MF
C5	90356-002	Capacitor, Tantalum 3.3Mf
CR1	95374-120	Diode, Zener, 12 Volt
Q1	90326-001	Transistor, NPN
Q2	90326-001	Transistor, NPN
Q3	90327-001	Transistor, PNP
Q4	90326-001	Transistor, NPN
Q5	90326-001	Transistor, NPN
Q6	90326-001	Transistor, NPN
R1	90364-102	Resistor, 1/4w, 5%, 1K
R2	90364-102	Resistor, 1/4w, 5%, 1K

Item	Part Number	Description
R4	90364-301	Resistor, 1/4w, 5%, 300 ohms
R5	90364-753	Resistor, 1/4w, 5%, 75K
R6	90364-562	Resistor, 1/4w, 5%, 5.6K
R7	90364-272	Resistor, 1/4w, 5%, 2.7K
R8	90364-121	Resistor, 1/4w, 5%, 120 ohms
R9	90364-121	Resistor, 1/4w, 5%, 120 ohms
R10	90364-303	Resistor, 1/4w, 5%, 30K
R11	90364-153	Resistor, 1/4w, 5%, 15K
R12	90364-222	Resistor, 1/4w, 5%, 2.2K
R13	90364-510	Resistor, 1/4w, 5%, 51 ohms
R14	90364-182	Resistor, 1/4w, 5%, 1.8K
R15	90364-562	Resistor, 1/4w, 5%, 5.6K
R16	90364-102	Resistor, 1/4w, 5%, 1K
R17	90364-102	Resistor, 1/4w, 5%, 1K
R18	90364-102	Resistor, 1/4w, 5%, 1K

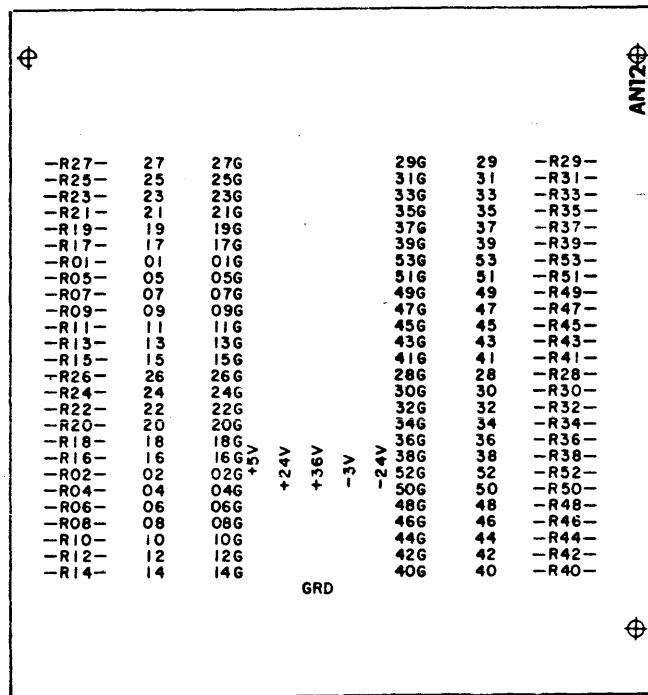


Figure 3-8. Assy, Cable Plug, AN12

Item	Part Number	Description
1	90290-001	Assy, Cable Plug, AN12
2	90291-001	Board, PW Cable Plug
3	90294-001	Spacer, Module
4	90536-001	Standoff
5	93356-204	Screw, Flat Head, Nylon, No. 4-40 x 1/4
6	93371-001	Cover

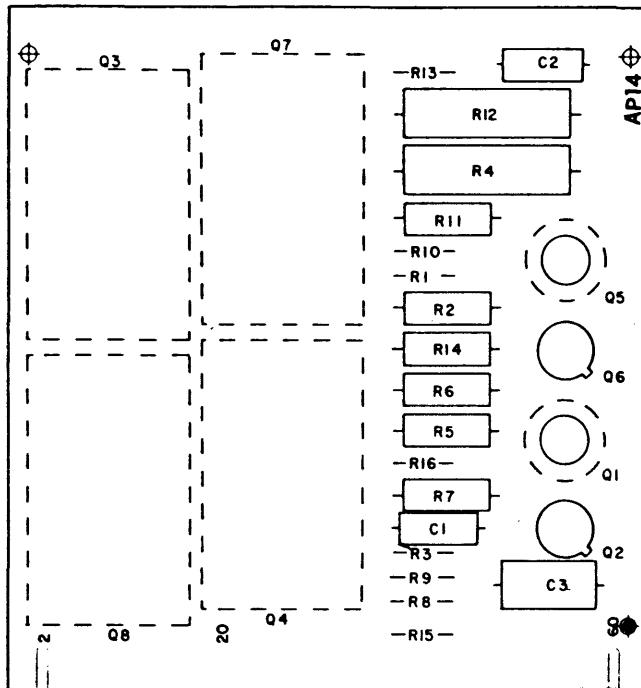


Figure 3-9. Assy, PWB, Servo Amplifier, AP14

Item	Part Number	Description
1	90559-001	Assy, PWB, Servo Amplifier
2	90560-001	Board, PW, Servo Amplifier
3	90228-001	Insulator, Transistor, Q1, Q5
4	90378-002	Heat Sink, Fan Top, Q1, Q5
5	90379-001	Insulator, Transistor, Q2, Q6
6	92819-001	Heat Sink, TO66 Q3, Q4, Q7, Q8
C1	90355-153	Capacitor, Mylar, .015Mf
C2	90355-153	Capacitor, Mylar, .015Mf
C3	90355-333	Capacitor, Mylar, .033Mf
Q1	90338-001	Transistor, NPN
Q2	90330-001	Transistor, PNP
Q3	90337-001	Transistor, PNP
Q4	90331-001	Transistor, NPN
Q5	90338-001	Transistor, NPN
Q6	90330-001	Transistor, PNP
Q7	90337-001	Transistor, PNP
Q8	90331-001	Transistor, NPN
R1	90364-101	Resistor, $\frac{1}{4}$ w, 5%, 100 ohms
R2	90365-221	Resistor, $\frac{1}{4}$ w, 5%, 220 ohms
R3	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R4	90371-102	Resistor, 5w, 5%, 100 ohms
R5	90365-240	Resistor, 1w, 5%, 24 ohms
R6	90365-240	Resistor, 1w, 5%, 24 ohms

Item	Part Number	Description
R7	90365-221	Resistor, 1/4w, 5%, 220 ohms
R8	90364-101	Resistor, 1/4w, 5%, 100 ohms
R9	90364-510	Resistor, 1/4w, 5%, 51 ohms
R10	90364-101	Resistor, 1/4w, 5%, 100 ohms
R11	90365-221	Resistor, 1/4w, 5%, 220 ohms
R12	90371-102	Resistor, 5w, 5%, 100 ohms
R13	90364-510	Resistor, 1/4w, 5%, 51 ohms
R14	90365-221	Resistor, 1/4w, 5%, 220 ohms
R15	90364-101	Resistor, 1/4w, 5%, 100 ohms
R16	90364-510	Resistor, 1/4w, 5%, 51 ohms

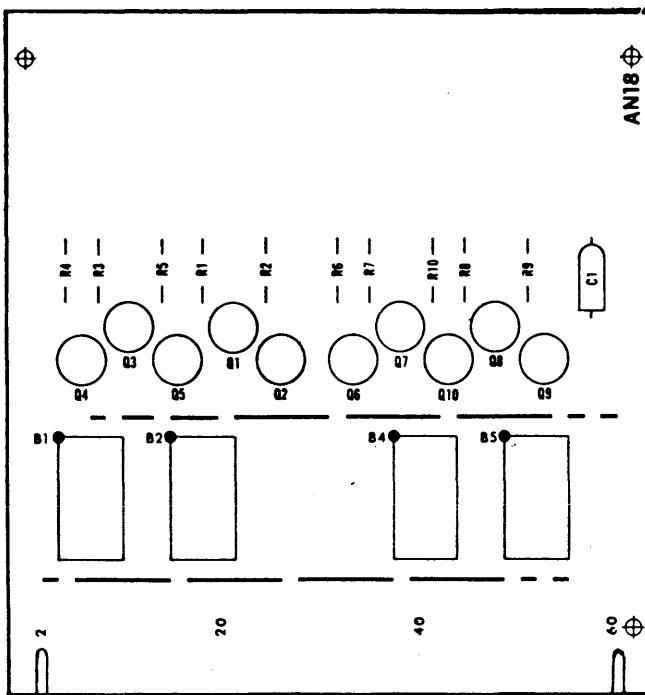


Figure 3-10. Assy, PWB, Line Driver, 5 Volt, AN18

Item	Part Number	Description
1	90966-001	Assy, PWB, Line Driver, 5 Volt
2	90967-001	Board, PW, Line Driver, 5 Volt
3	90228-001	Insulator, Transistor
B1	90311-001	Gate, Nand, Quad, 2-Input, DTL
B2	90314-001	Gate, Hex, 1-Input
B4	90314-001	Gate, Hex, 1-Input
B5	90311-001	Gate, Nand, Quad, 2-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
Q1	90328-002	Transistor, NPN
Q2	90328-002	Transistor, NPN
Q3	90328-002	Transistor, NPN
Q4	90328-002	Transistor, NPN
Q5	90328-002	Transistor, NPN
Q6	90328-002	Transistor, NPN
Q7	90328-002	Transistor, NPN
Q8	90328-002	Transistor, NPN
Q9	90328-002	Transistor, NPN
Q10	90328-002	Transistor, NPN
R1	90364-511	Resistor, 1/4w, 5%, 510 ohms
R2	90364-511	Resistor, 1/4w, 5%, 510 ohms
R3	90364-511	Resistor, 1/4w, 5%, 510 ohms
R4	90364-511	Resistor, 1/4w, 5%, 510 ohms
R5	90364-511	Resistor, 1/4w, 5%, 510 ohms
R6	90364-511	Resistor, 1/4w, 5%, 510 ohms
R7	90364-511	Resistor, 1/4w, 5%, 510 ohms
R8	90364-511	Resistor, 1/4w, 5%, 510 ohms
R9	90364-511	Resistor, 1/4w, 5%, 510 ohms
R10	90364-511	Resistor, 1/4w, 5%, 510 ohms

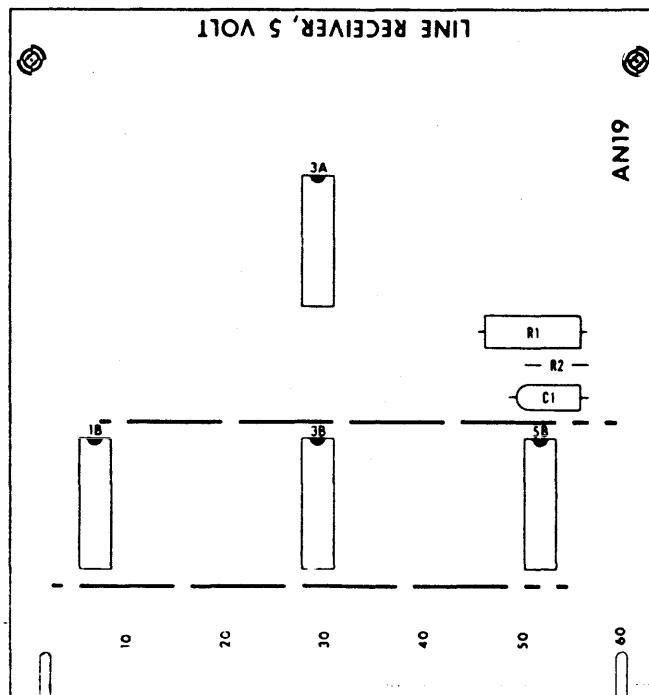


Figure 3-11. Assy, PWB, Line Receiver, 5 Volt, AN19

Item	Part Number	Description
1	90970-001	Assy, PWB, Line Receiver, 5 Volt
2	90971-001	Board, PW, Line Receiver, 5 Volt
A3	92132-002	Gate, Nand, Dual, 4-Input T2
B1	90314-002	Gate, Nand, Hex, 1-Input, DTL
B3	90314-002	Gate, Nand, Hex, 1-Input, DTL
B5	90314-002	Gate, Nand, Hex, 1-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
R1	90365-151	Resistor, 1w, 5%, 150 ohms
R2	90364-331	Resistor, 1/4w, 5%, 330 ohms

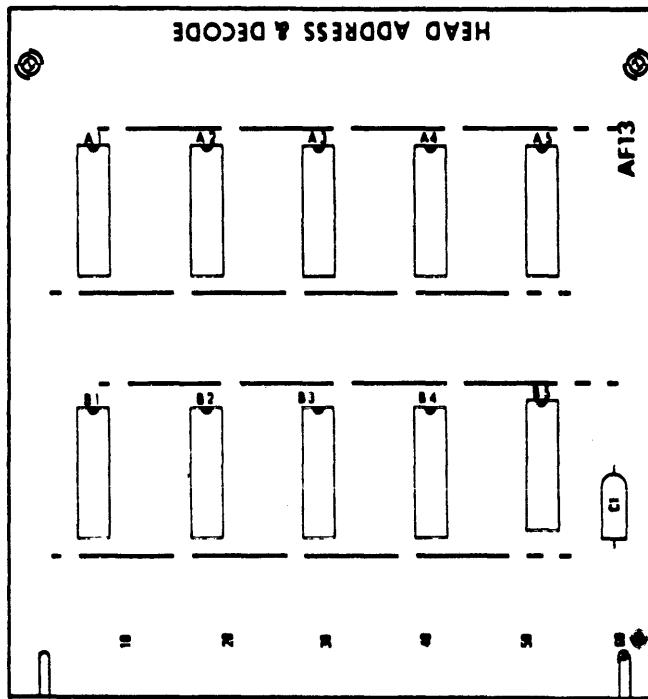


Figure 3-12. Assy, PWB, Head Address and Decode, AF13

Item	Part Number	Description
1	91069-001	Assy, PWB, Head Address and Decode
2	91070-001	Board, PW, Head Address and Decode
A1	90310-001	Flip Flop, Clocked, DTL
A2	90310-001	Flip Flop, Clocked, DTL
A3	90310-001	Flip Flop, Clocked, DTL
A4	90310-001	Flip Flop, Clocked, DTL
A5	90310-001	Flip Flop, Clocked, DTL
B1	90311-001	Gate, Nand, Quad, 2-Input, DTL
B2	90311-001	Gate, Nand, Quad, 2-Input, DTL
B3	90311-001	Gate, Nand, Quad, 2-Input, DTL
B4	90311-001	Gate, Nand, Quad, 2-Input, DTL
B5	92135-001	Decoder, 4-10 Line
C1	90356-001	Capacitor, Tantalum, 4.7Mf

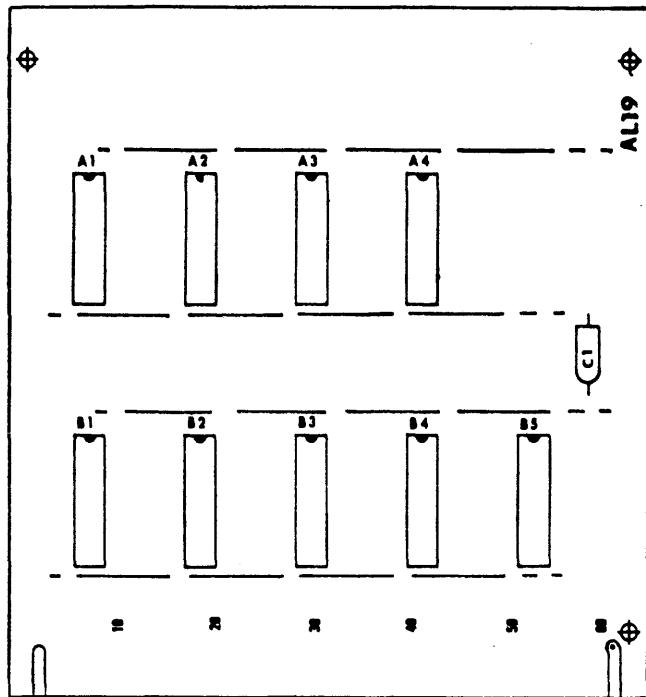


Figure 3-13. Assy, PWB, Control Logic III, AL19

Item	Part Number	Description
1	91089-001	Assy, PWB, Control Logic III
2	91090-001	Board, PW, Control Logic III
A1	90310-001	Flip Flop, Clocked, DTL
A2	90312-001	Gate, Nand, Triple, 3-Input, DTL
A3	90312-001	Gate, Nand, Triple, 3-Input, DTL
A4	90311-001	Gate, Nand Quad, 2-Input, DTL
B1	90311-001	Gate, Nand, Quad, 2-Input, DTL
B2	90311-001	Gate, Nand, Quad, 2-Input, DTL
B3	90314-001	Gate, Nand, Hex, 1-Input
B4	90311-001	Gate, Nand, Quad, 2-Input, DTL
B5	90310-001	Flip Flop, Clocked, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf

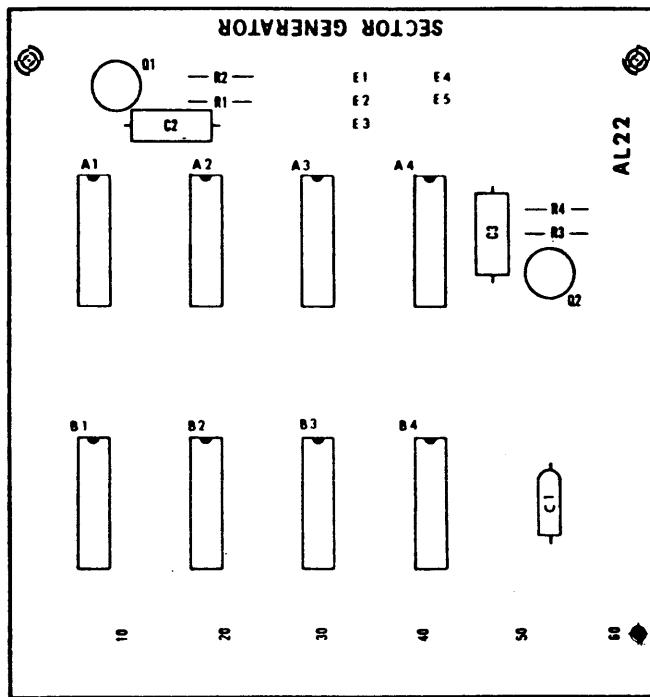


Figure 3-14. Assy, PWB, Sector Generator, AL22

Item	Part Number	Description
1	91725-001	Assy, PWB, Sector Generator
2	91726-001	Board, PW, Sector Generator
3	90228-001	Insulator, Transistor, Q1, Q2
A1	90311-001	Gate, Nand, Quad, 2-Input, DTL
A2	90310-001	Flip Flop, Clocked, DTL
A3	90310-001	Flip Flop, Clocked, DTL
A4	90312-001	Gate, Nand, Triple, 3-Input, DTL
C1	90386-001	Capacitor, Tantalum, 4.7Mf
C2	90354-511	Capacitor, Mica, 510Pf
C3	90354-511	Capacitor, Mica, 510Pf
Q1	90326-001	Transistor, NPN
Q2	90326-001	Transistor, NPN
R1	90364-512	Resistor, $\frac{1}{4}w$, 5%, 5.1K
R2	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R3	90364-512	Resistor, $\frac{1}{4}w$, 5%, 5.1K
R4	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K

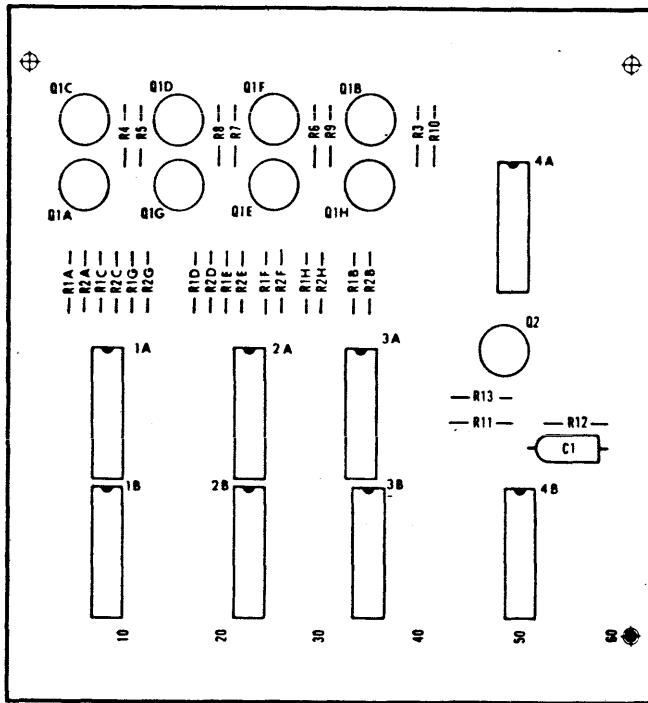


Figure 3-15. Assy, PWB, D-A Converter, AP12

Item	Part Number	Description
1	91852-001	Assy, PWB, D-A Converter
2	91853-001	Board, PW, D-A Converter
3	90228-001	Insulator, Transistor
A1	90311-002	Gate, Nand, Quad, 2-Input, DTL
A2	90311-002	Gate, Nand, Quad, 2-Input, DTL
A3	90311-002	Gate, Nand, Quad, 2-Input, DTL
A4	90311-002	Gate, Nand, Quad, 2-Input, DTL
B1	90311-002	Gate, Nand, Quad, 2-Input, DTL
B2	90311-002	Gate, Nand, Quad, 2-Input, DTL
B3	90310-002	Flip Flop, Clocked, DTL
B4	90313-002	Gate, Nand, Dual, 4-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
Q1A	90327-002	Transistor, PNP
Q1B	90327-002	Transistor, PNP
Q1C	90327-002	Transistor, PNP
Q1D	90327-002	Transistor, PNP
Q1E	90327-002	Transistor, PNP
Q1F	90327-002	Transistor, PNP
Q1G	90327-002	Transistor, PNP
Q1H	90327-002	Transistor, PNP
Q2	90326-002	Transistor, NPN
R1A	90364-102	Resistor, 1/4w, 5%, 1K
R1B	90364-102	Resistor, 1/4w, 5%, 1K
R1C	90364-102	Resistor, 1/4w, 5%, 1K

Item	Part Number	Description
R1D	90364-222	Resistor, 1/4w, 5%, 2.2K
R1E	90364-222	Resistor, 1/4w, 5%, 2.2K
R1F	90364-222	Resistor, 1/4w, 5%, 2.2K
R1G	90364-222	Resistor, 1/4w, 5%, 2.2K
R1H	90364-222	Resistor, 1/4w, 5%, 2.2K
R2A	90364-222	Resistor, 1/4w, 5%, 2.2K
R2B	90364-222	Resistor, 1/4w, 5%, 2.2K
R2C	90364-222	Resistor, 1/4w, 5%, 2.2K
R2D	90364-222	Resistor, 1/4w, 5%, 2.2K
R2E	90364-222	Resistor, 1/4w, 5%, 2.2K
R2F	90364-222	Resistor, 1/4w, 5%, 2.2K
R2G	90364-222	Resistor, 1/4w, 5%, 2.2K
R2H	90364-222	Resistor, 1/4w, 5%, 2.2K
R3	90367-103	Resistor, 1/8w, 1%, 1K
R4	90367-278	Resistor, 1/8w, 1%, 3.32K
R5	90367-355	Resistor, 1/8w, 1%, 5.62K
R6	90367-125	Resistor, 1/8w, 1%, 11.5K
R7	90367-188	Resistor, 1/8w, 1%, 17.8K
R8	90367-258	Resistor, 1/8w, 1%, 28.7K
R9	90367-286	Resistor, 1/8w, 1%, 34.8K
R10	90367-208	Resistor, 1/8w, 1/, 2.05K
R11	90364-102	Resistor, 1/4w, 5%, 1K
R12	90364-102	Resistor, 1/4w, 5%, 1K
R13	90364-562	Resistor, 1/4w, 5%, 5.6K

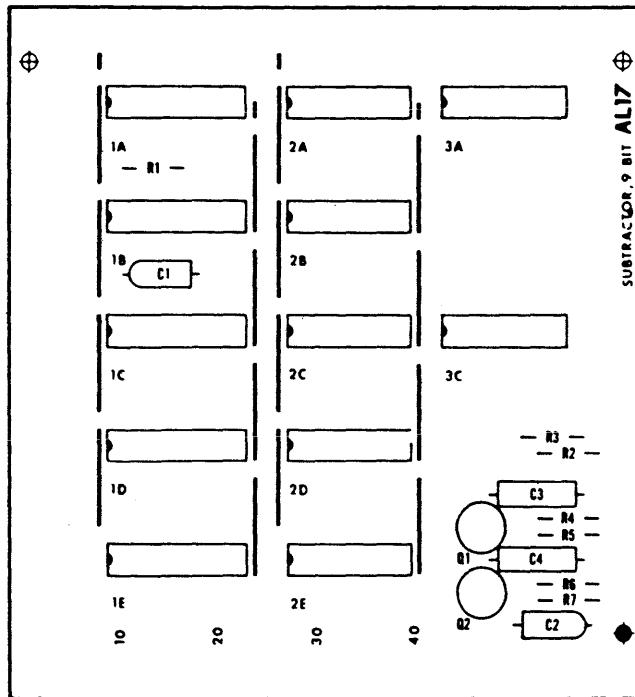


Figure 3-16. Assy, PWB, Subtractor, Nine Bit, AL17

Item	Part Number	Description
1	91855-001	Assy, PWB, Subtractor, 9 Bit
2	91856-001	Board, PW, Subtractor, 9 Bit
3	90228-001	Insulator, Transistor
A1	90317-002	Adder, Dual, TTL
A2	90311-002	Gate, Nand, Quad, 2-Input, DTL
A3	90314-002	Gate, Nand, Hex, 1-Input, DTL
B1	90317-002	Adder, Dual, TTL
B2	90311-002	Gate, Nand, Quad, 2-Input, DTL
C1	90317-002	Adder, Dual, TTL
C2	90311-002	Gate, Nand, Quad, 2-Input, DTL
C3	90314-002	Gate, Nand, Hex, 1-Input, DTL
D1	90317-002	Adder, Dual, TTL
D2	90311-002	Gate, Nand, Quad, 2-Input, DTL
E1	90317-002	Adder, Dual, TTL
E2	90311-002	Gate, Nand, Quad, 2-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90356-001	Capacitor, Tantalum, 4.7Mf
C3	90354-181	Capacitor, Mica, 180Pf
C4	90354-470	Capacitor, Mica, 47Pf
Q1	90328-002	Transistor, NPN
Q2	90328-002	Transistor, NPN
R1	90364-272	Resistor, 1/4w, 5%, 2.7K

Item	Part Number	Description
R2	90364-431	Resistor, $\frac{1}{4}$ w, 5%, 430 ohms
R3	SELECTED	Resistor, $\frac{1}{4}$ w, 5%
R4	90364-272	Resistor, $\frac{1}{4}$ w, 5%, 2.7K
R5	90364-391	Resistor, $\frac{1}{4}$ w, 5%, 390 ohms
R6	90364-512	Resistor, $\frac{1}{4}$ w, 5%, 5.1K
R7	90364-102	Resistor, $\frac{1}{4}$ w, 5%, 1K

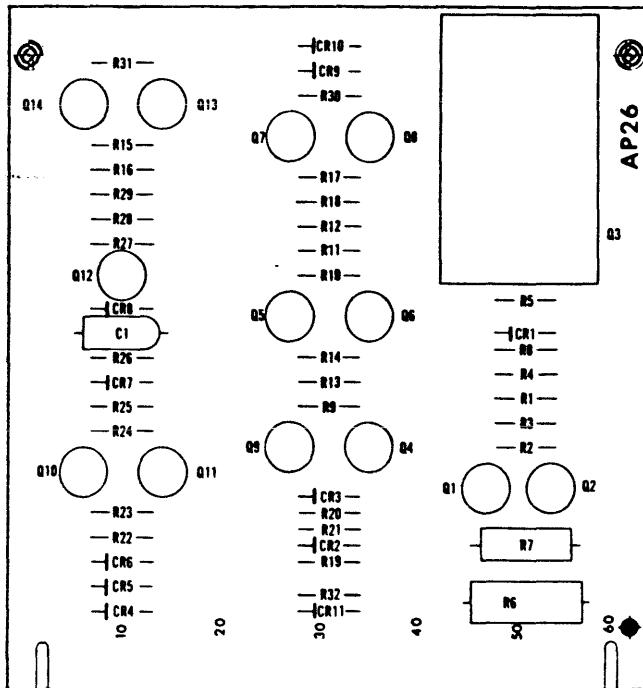


Figure 3-17. Assy, PWB, Regulator and Power Monitor, AP26

Item	Part Number	Description
1	93059-001	Assy, PWB, Regulator and Power Monitor
2	93060-001	Board, PW, Regulator and Power Monitor
3	90228-001	Insulator, Transistor
4	90379-001	Insulator, Transistor
5	92819-001	Heat Sink, TO66 Q3
C1	90356-002	Capacitor, Tantalum, 3.3Mf
CR1	90346-062	Diode, Zener, 6.2V
CR2	90346-120	Diode, Zener, 12V
CR3	90343-001	Diode, Low Capacitance
CR4	90342-001	Diode, General Purpose
CR5	90343-001	Diode, Low Capacitance
CR6	90343-001	Diode, Low Capacitance
CR7	90343-001	Diode, Low Capacitance
CR8	90343-001	Diode, Low Capacitance
CR9	90343-001	Diode, Low Capacitance
CR10	90343-001	Diode, Low Capacitance
CR11	90344-001	Diode, Medium Current
Q1	90338-001	Transistor, NPN
Q2	90330-001	Transistor, PNP
Q3	90331-001	Transistor, NPN
Q4	90327-001	Transistor, NPN
Q5	90327-001	Transistor, NPN
Q6	90327-001	Transistor, NPN
Q7	90327-001	Transistor, NPN

Item	Part Number	Description
Q8	90327-001	Transistor, NPN
Q9	90326-001	Transistor, NPN
Q10	90326-001	Transistor, NPN
Q11	90326-001	Transistor, NPN
Q12	90327-001	Transistor, NPN
Q13	90326-001	Transistor, NPN
Q14	90326-001	Transistor, NPN
R1	90364-222	Resistor, 1/4w, 5%, 2.2K
R2	90367-424	Resistor, 1/8w, 1%, 909 ohms
R3	90367-383	Resistor, 1/8w, 1%, 6.81K
R4	90364-102	Resistor, 1/4w, 5%, 1K
R5	90364-910	Resistor, 1/4w, 5%, 91 ohms
R6	90366-101	Resistor, 3w, 5%, 10 ohms
R7	90365-302	Resistor, 1w, 5%, 3K
R8	90367-131	Resistor, 1/8w, 1%, 1.21K
R9	90367-271	Resistor, 1/8w, 1%, 3.16K
R10	90364-333	Resistor, 1/4w, 5%, 33K
R11	90364-102	Resistor, 1/4w, 5%, 1K
R12	90364-102	Resistor, 1/4w, 5%, 1K
R13	90367-125	Resistor, 1/8w, 1%, 11.5K
R14	90367-271	Resistor, 1/8w, 1%, 3.16K
R15	90367-202	Resistor, 1/8w, 1%, 19.6K
R16	90367-271	Resistor, 1/8w, 1%, 11.5K
R17	90367-230	Resistor, 1/8w, 1%, 23.7K
R18	90367-271	Resistor, 1/8w, 1%, 3.16K
R19	90364-562	Resistor, 1/4w, 5%, 5.6K
R20	90367-341	Resistor, 1/8w, 1%, 5.11K
R21	90367-425	Resistor, 1/8w, 1%, 9.09K
R22	90364-103	Resistor, 1/4w, 5%, 10K
R23	90364-472	Resistor, 1/4w, 5%, 4.7K
R24	90364-103	Resistor, 1/4w, 5%, 10K
R25	90364-103	Resistor, 1/4w, 5%, 10K
R26	90367-252	Resistor, 1/8w, 1%, 274K
R27	90364-104	Resistor, 1/4w, 5%, 100K
R28	90364-153	Resistor, 1/4w, 5%, 15K
R29	90364-223	Resistor, 1/4w, 5%, 22K
R30	90364-103	Resistor, 1/4w, 5%, 10K
R31	90364-472	Resistor, 1/4w, 5%, 4.7K
R32	90364-103	Resistor, 1/4w, 5%, 10K

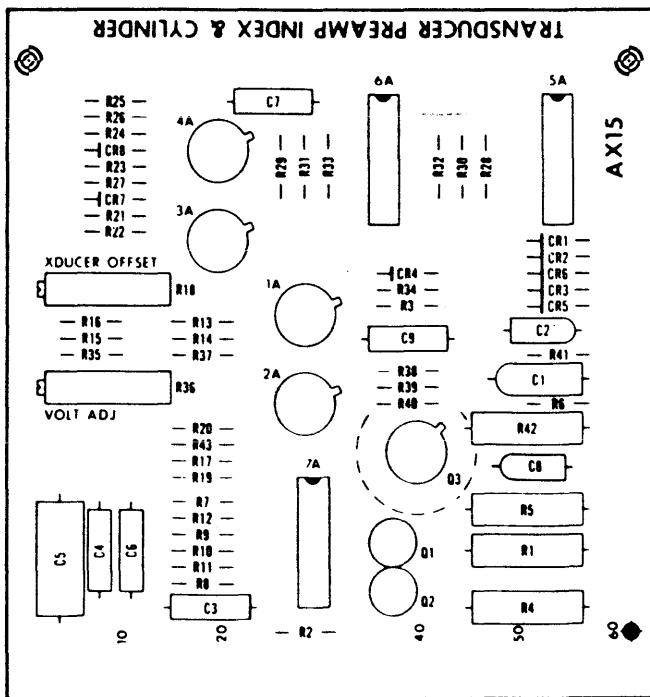


Figure 3-18. Assy, PWB, Transducer Preamp, Index and Cylinder, AX15

Item	Part Number	Description
1	93161-001	Assy, Transducer Preamp, Index and Cylinder
2	93162-001	Board, PW, Transducer, Preamp, Index and Cylinder
3	90378-001	Heat Sink Fan Top Q3
4	90379-001	Insulator, Transistor
A1	92140-001	Amplifier, Operational
A2	92140-001	Amplifier, Operational
A3	92138-001	Amplifier, Operational
A4	92138-001	Amplifier, Operational
A5	90314-002	Gate, Nand, Hex, 1-Input, DTL
A6	90322-002	Dual Differential Comparator
A7	90322-002	Dual Differential Comparator
C1	90356-002	Capacitor, Tantalum, 3.3Mf
C2	90356-001	Capacitor, Tantalum 4.7Mf
C3	90354-511	Capacitor, Mica, 510Pf
C4	90355-102	Capacitor, Mylar, .001Mf
C5	90355-223	Capacitor, Mylar, .022Mf
C6	90355-102	Capacitor, Mylar, .001Mf
C7	90354-221	Capacitor, Mica, 220Pf
C8	90356-001	Capacitor, Tantalum, 4.7Mf
C9	90355-102	Capacitor, Mylar, .001Mf
CR1	90346-062	Diode, Zener, 6.2V
CR2	90346-062	Diode, Zener, 6.2V
CR3	90346-062	Diode, Zener, 6.2V
CR4	90346-062	Diode, Zener, 6.2V

Item	Part Number	Description
CR5	90346-062	Diode, Zener, 6.2V
CR6	90346-062	Diode, Zener, 6.2V
CR7	90342-001	Diode, General Purpose
CR8	90342-001	Diode, General Purpose
Q1	90326-002	Transistor, NPN
Q2	90326-002	Transistor, NPN
Q3	90330-001	Transistor, PNP
R1	90366-249	Resistor, 3w, 5%, 270 ohms
R2	90367-208	Resistor, 1/8w, 1%, 2.05K
R3	90364-474	Resistor, 1/4w, 5%, 470K
R4	90366-249	Resistor, 3w, 5%, 270 ohms
R5	90366-249	Resistor, 3w, 5%, 270 ohms
R6	90364-512	Resistor, 1/4w, 5%, 5.1K
R7	90364-103	Resistor, 1/4w, 5%, 10K
R8	90364-101	Resistor, 1/4w, 5%, 100 ohms
R9	90367-104	Resistor, 1/8w, 1%, 10K
R10	90367-165	Resistor, 1/8w, 1%, 154 ohms
R11	90364-512	Resistor, 1/4w, 5%, 5.1K
R12	90364-101	Resistor, 1/4w, 5%, 200 ohms
R13	90367-411	Resistor, 1/8w, 1%, 8.25K
R14	90367-353	Resistor, 1/8w, 1%, 56.2 ohms
R15	90367-353	Resistor, 1/8w, 1%, 56.2 ohms
R16	90367-411	Resistor, 1/8w, 1%, 8.25K
R17	90367-160	Resistor, 1/8w, 1%, 14.7K
R18	92244-150	Resistor, Variable, 500 ohms
R19	90367-209	Resistor, 1/8w, 1%, 20.5K
R20	90367-342	Resistor, 1/8w, 1%, 51.1K
R21	90367-104	Resistor, 1/8w, 1%, 10K
R22	90367-383	Resistor, 1/8w, 1%, 6.81K
R23	90367-202	Resistor, 1/8w, 1%, 19.6K
R24	90367-104	Resistor, 1/8w, 1%, 10K
R25	90367-104	Resistor, 1/8w, 1%, 10K
R26	90367-278	Resistor, 1/8w, 1%, 3.32K
R27	90367-104	Resistor, 1/8w, 1%, 10K
R28	90367-425	Resistor, 1/8w, 1%, 9.09K
R29	90367-390	Resistor, 1/8w, 1%, 7.15K
R30	90367-326	Resistor, 1/8w, 1%, 464 ohms
R31	90367-326	Resistor, 1/8w, 1%, 464 ohms
R32	90364-823	Resistor, 1/4w, 5%, 82K
R33	90364-823	Resistor, 1/4w, 5%, 82K
R34	90364-562	Resistor, 1/4w, 5%, 5.6K
R35	90364-752	Resistor, 1/4w, 5%, 7.5K
R36	92244-250	Resistor, Variable, 5K
R37	90364-103	Resistor, 1/4w, 5%, 10K
R38	90364-393	Resistor, 1/4w, 5%, 39K
R39	90367-326	Resistor, 1/8w, 1%, 464 ohms
R40	90364-823	Resistor, 1/4w, 5%, 82K
R41	90364-101	Resistor, 1/4w, 5%, 100 ohms
R42	90366-324	Resistor, 3w, 5%, 4.7 ohms
R43	90367-104	Resistor, 1/8w, 1%, 10K

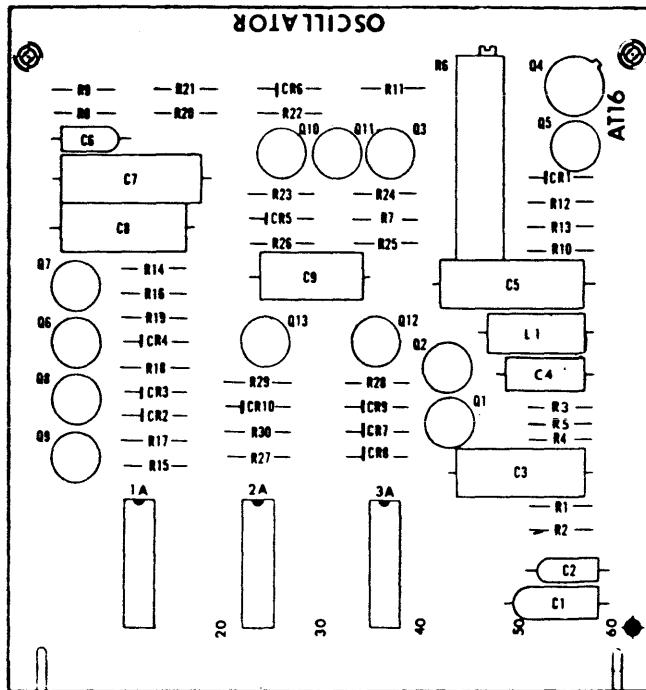


Figure 3-19. Assy, PWB, Oscillator, AT16

Item	Part Number	Description
1	93463-001	Assy, PWB, Oscillator
2	93464-001	Board, PW, Oscillator
3	90228-001	Insulator, Transistor, Q1-Q3, Q5-Q13
4	90379-001	Insulator, Transistor, Q4
A1	90310-002	Flip Flop, Clocked, DTL
A2	90310-002	Flip Flop, Clocked, DTL
A3	90311-002	Gate, Nand, Quad 2-Input, DTL
C1	90356-002	Capacitor, Tantalum, 3.3Mf
C2	90356-001	Capacitor, Tantalum, 4.7Mf
C3	90355-683	Capacitor, Mylar, .068Mf
C4	90354-681	Capacitor, Mica, 680Pf
C5	90355-104	Capacitor, Mylar, .1Mf
C6	90356-003	Capacitor, Tantalum, 1.0Mf
C7	90355-104	Capacitor, Mylar, .1Mf
C8	90355-683	Capacitor, Mylar, .068Mf
C9	90355-223	Capacitor, Mylar, .022Mf
CR1	90342-001	Diode, General Purpose
CR2	90342-001	Diode, General Purpose
CR3	90343-001	Diode, Low Capacitance
CR4	90343-001	Diode, Low Capacitance
CR5	90343-001	Diode, Low Capacitance
CR6	90343-001	Diode, Low Capacitance
CR7	90342-001	Diode, General Purpose
CR8	90342-001	Diode, General Purpose

Item	Part Number	Description
CR9	90343-001	Diode, Low Capacitance
CR10	90343-001	Diode, Low Capacitance
L1	90964-110	Indicator 1100Uh
Q1	90326-002	Transistor, NPN
Q2	90326-002	Transistor, NPN
Q3	90326-002	Transistor, NPN
Q4	90330-001	Transistor, PNP
Q5	90338-001	Transistor, NPN
Q6	90326-002	Transistor, NPN
Q7	90326-002	Transistor, NPN
Q8	90328-001	Transistor, NPN
Q9	90328-001	Transistor, NPN
Q10	90327-002	Transistor, PNP
Q11	90327-002	Transistor, PNP
Q12	90326-002	Transistor, NPN
Q13	90326-002	Transistor, NPN
R1	90364-393	Resistor, 1/4w, 5%, 39K
R2	90364-103	Resistor, 1/4w, 5%, 10K
R3	90364-102	Resistor, 1/4w, 5%, 1K
R4	90364-152	Resistor, 1/4w, 5%, 1.5K
R5	90364-102	Resistor, 1/4w, 5%, 1K
R6	90368-103	Resistor, Variable, 10K
R7	90364-512	Resistor, 1/4w, 5%, 5.1K
R8	90364-203	Resistor, 1/4w, 5%, 20K
R9	90364-202	Resistor, 1/4w, 5%, 2K
R10	90364-202	Resistor, 1/4w, 5%, 2K
R11	90364-101	Resistor, 1/4w, 5%, 100 ohms
R12	90364-101	Resistor, 1/4w, 5%, 100 ohms
R13	90364-101	Resistor, 1/4w, 5%, 100 ohms
R14	90364-471	Resistor, 1/4w, 5%, 470 ohms
R15	90364-222	Resistor, 1/4w, 5%, 2.2K
R16	90364-472	Resistor, 1/4w, 5%, 4.7K
R17	90364-511	Resistor, 1/4w, 5%, 510 ohms
R18	90364-103	Resistor, 1/4w, 5%, 10K
R19	90364-202	Resistor, 1/4w, 5%, 2K
R20	90364-221	Resistor, 1/4w, 5%, 220 ohms
R21	90364-222	Resistor, 1/4w, 5%, 2.2K
R22	90364-182	Resistor, 1/4w, 5%, 1.8K
R23	90367-271	Resistor, 1/8w, 1%, 3.16K
R24	90367-194	Resistor, 1/8w, 1%, 1.87K
R25	90364-472	Resistor, 1/4w, 5%, 4.7K
R26	90364-472	Resistor, 1/4w, 5%, 4.7K
R27	90364-103	Resistor, 1/4w, 5%, 10K
R28	90367-472	Resistor, 1/4w, 5%, 4.7K
R29	90367-472	Resistor, 1/4w, 5%, 4.7K
R30	90364-102	Resistor, 1/4w, 5%, 1K

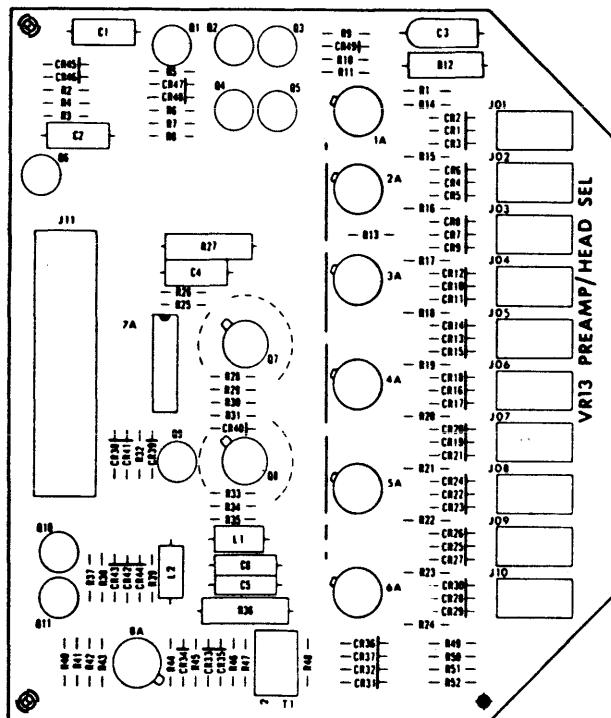


Figure 3-20. Assy, PWB, Preamp/Head Select, VR13

Item	Part Number	Description
1	93605-001	Assy, PWB, Preamp/Head Select
2	93606-001	Board, PW, Preamp/Head Select
3	90562-001	Connector, 5 Pin J01-J10
4	90572-025	Connector, PW Board Mtg J11
A1	92139-001	Driver, Dual Peripheral
A2	92139-001	Driver, Dual Peripheral
A3	92139-001	Driver, Dual Peripheral
A4	92139-001	Driver, Dual Peripheral
A5	92139-001	Driver, Dual Peripheral
A6	92139-001	Driver, Dual Peripheral
A7	92136-002	Flip Flop, Dual-D Type
A8	90319-001	Amplifier, Differential
C1	90355-103	Capacitor, Mylar, .01Mf
C2	90355-103	Capacitor, Mylar, .01Mf
C3	90356-002	Capacitor, Tantalum, 3.3Mf
C4	90355-103	Capacitor, Mylar, .01Mf
C5	90355-102	Capacitor, Mylar, .001Mf
C6	90355-102	Capacitor, Mylar, .001Mf
C7	90354-331	Capacitor, Mica, 330Pf
CR1	90343-001	Diode, Low Capacitance
CR2	90343-001	Diode, Low Capacitance
CR3	90343-001	Diode, Low Capacitance
CR4	90343-001	Diode, Low Capacitance

Item	Part Number	Description
CR5	90343-001	Diode, Low Capacitance
CR6	90343-001	Diode, Low Capacitance
CR7	90343-001	Diode, Low Capacitance
CR8	90343-001	Diode, Low Capacitance
CR9	90343-001	Diode, Low Capacitance
CR10	90343-001	Diode, Low Capacitance
CR11	90343-001	Diode, Low Capacitance
CR12	90343-001	Diode, Low Capacitance
CR13	90343-001	Diode, Low Capacitance
CR14	90343-001	Diode, Low Capacitance
CR15	90343-001	Diode, Low Capacitance
CR16	90343-001	Diode, Low Capacitance
CR17	90343-001	Diode, Low Capacitance
CR18	90343-001	Diode, Low Capacitance
CR19	90343-001	Diode, Low Capacitance
CR20	90343-001	Diode, Low Capacitance
CR21	90343-001	Diode, Low Capacitance
CR22	90343-001	Diode, Low Capacitance
CR23	90343-001	Diode, Low Capacitance
CR24	90343-001	Diode, Low Capacitance
CR25	90343-001	Diode, Low Capacitance
CR26	90343-001	Diode, Low Capacitance
CR27	90343-001	Diode, Low Capacitance
CR28	90343-001	Diode, Low Capacitance
CR29	90343-001	Diode, Low Capacitance
CR30	90343-001	Diode, Low Capacitance
CR32	90343-001	Diode, Low Capacitance
CR33	90343-001	Diode, Low Capacitance
CR34	90343-001	Diode, Low Capacitance
CR35	90346-120	Diode, Zener, 12V
CR36	90343-001	Diode, Low Capacitance
CR37	90343-001	Diode, Low Capacitance
CR38	90346-062	Diode, Zener, 6.2V
CR39	90343-001	Diode, Low Capacitance
CR40	90346-062	Diode, Zener, 6.2V
CR41	90343-001	Diode, Low Capacitance
CR42	90342-001	Diode, General Purpose
CR43	90343-001	Diode, Low Capacitance
CR44	90343-001	Diode, Low Capacitance
CR45	90346-120	Diode, Zener, 12V
CR46	90346-120	Diode, Zener, 12V
CR47	90343-001	Diode, Low Capacitance
CR48	90343-001	Diode, Low Capacitance
CR49	90343-001	Diode, Low Capacitance
L1	90376-130	Inductor, Molded, 130Uh
L2	90376-130	Inductor, Molded, 130Uh

Item	Part Number	Description
R1	90364-151	Resistor, 1/4w, 5%, 180 ohms
R2	90364-821	Resistor, 1/4w, 5%, 820 ohms
R3	90364-222	Resistor, 1/4w, 5%, 2.2K
R4	90364-102	Resistor, 1/4w, 5%, 1K
R5	90367-132	Resistor, 1/8w, 1%, 12.1K
R6	90364-222	Resistor, 1/4w, 5%, 2.2K
R7	90367-222	Resistor, 1/8w, 1%, 2.26K
R8	90364-203	Resistor, 1/4w, 5%, 20K
R9	90367-159	Resistor, 1/8w, 1%, 1.47K
R10	90367-202	Resistor, 1/8w, 1%, 19.6K
R11	90364-102	Resistor, 1/4w, 5%, 1K
R12	90364-102	Resistor, 1w, 5%, 1K
R13	90364-301	Resistor, 1/4w, 5%, 300 ohms
R14	90367-411	Resistor, 1/8w, 1%, 8.25K
R15	90367-411	Resistor, 1/8w, 1%, 8.25K
R16	90367-411	Resistor, 1/8w, 1%, 8.25K
R17	90367-411	Resistor, 1/8w, 1%, 8.25K
R18	90367-411	Resistor, 1/8w, 1%, 8.25K
R19	90367-411	Resistor, 1/8w, 1%, 8.25K
R20	90367-411	Resistor, 1/8w, 1%, 8.25K
R21	90367-411	Resistor, 1/8w, 1%, 8.25K
R22	90367-411	Resistor, 1/8w, 1%, 8.25K
R23	90367-411	Resistor, 1/8w, 1%, 8.25K
R24	90367-411	Resistor, 1/8w, 1%, 8.25K
R25	90364-102	Resistor, 1/4w, 5%, 1K
R26	90364-102	Resistor, 1/4w, 5%, 1K
R27	90366-354	Resistor, 3w, 5%, 560 ohms
R28	90364-750	Resistor, 1/4w, 5%, 75 ohms
R29	90364-331	Resistor, 1/4w, 5%, 330 ohms
R30	90364-331	Resistor, 1/4w, 5%, 330 ohms
R31	90364-102	Resistor, 1/4w, 5%, 1K
R32	90364-302	Resistor, 1/4w, 5%, 3K
R33	90367-131	Resistor, 1/8w, 1%, 1.21K
R34	90364-243	Resistor, 1/4w, 5%, 24K
R35	90364-243	Resistor, 1/4w, 5%, 24K
R36	90366-382	Resistor, 3w, 5%, 680 ohms
R37	90364-562	Resistor, 1/4w, 5%, 5.6K
R38	90364-101	Resistor, 1/4w, 5%, 100 ohms
R39	90364-103	Resistor, 1/4w, 5%, 10K
R40	90364-750	Resistor, 1/4w, 5%, 75 ohms
R41	90364-750	Resistor, 1/4w, 5%, 75 ohms
R42	90364-472	Resistor, 1/4w, 5%, 4.7K
R43	90364-102	Resistor, 1/4w, 5%, 1K
R44	90364-510	Resistor, 1/4w, 5%, 51 ohms
R45	90364-332	Resistor, 1/4w, 5%, 3.3K
R46	90364-243	Resistor, 1/4w, 5%, 24K

Item	Part Number	Description
R47	90364-332	Resistor, 1/4w, 5%, 3.3K
R48	90364-242	Resistor, 1/4w, 5%, 2.4K
R49	90364-124	Resistor, 1/4w, 5%, 120K
R50	90364-124	Resistor, 1/4w, 5%, 120K
R51	90364-303	Resistor, 1/4w, 5%, 30K
R52	90364-303	Resistor, 1/4w, 5%, 30K
T1	90375-001	Transformer, Pulse

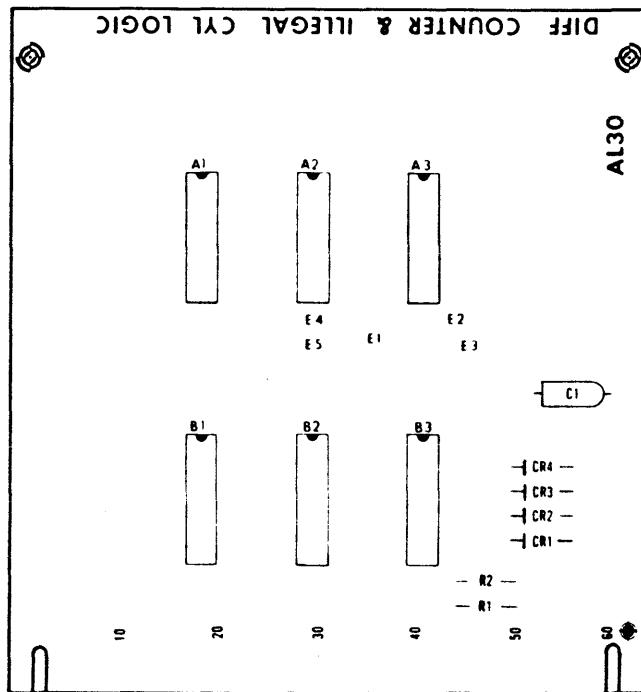


Figure 3-21. Assy, PWB, Difference Counter and Illegal Cylinder, AL30

Item	Part Number	Description
1	94014-001	Assy, PWB, Difference Counter and Illegal Cylinder
2	94015-001	Board, PW, Difference Counter and Illegal Cylinder
A1	90311-002	Gate, Nand, Quad, 2-Input, DTL
A2	90314-002	Gate, Nand, Hex, 1-Input, DTL
A3	90311-002	Gate, Nand, Quad, 2-Input, DTL
B1	90311-002	Gate, Nand, Quad, 2-Input, DTL
B2	90312-002	Gate, Nand, Triple, 3-Input
B3	90313-002	Gate, Nand, Dual, 4-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
CR1	90342-001	Diode, General Purpose
CR2	90342-001	Diode, General Purpose
CR3	90342-001	Diode, General Purpose
CR4	90342-001	Diode, General Purpose
R1	90364-102	Resistor, 1/4w, 5%, 1K
R2	90364-102	Resistor, 1/4w, 5%, 1K

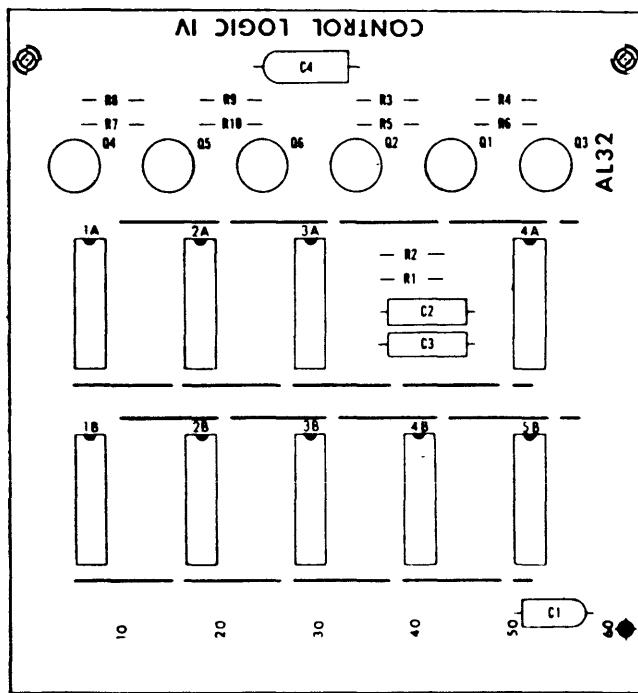


Figure 3-22. Assy, PWB, Control Logic IV, AL32

Item	Part Number	Description
1	94050-001	Assy, PWB, Control Logic IV
2	90451-001	Board, PW, Control Logic IV
3	90228-001	Insulator, Transistor, Q1-Q6
A1	90310-002	Flip Flop, Clocked, DTL
A2	90312-002	Gate, Nand, Triple
A3	90311-002	Gate, Nand, Quad, 2-Input
A4	90313-002	Gate, Nand, Dual, 4-Input
B1	90311-002	Gate, Nand, Quad, 2-Input
B2	90310-002	Flip Flop, Clocked, DTL
B3	90314-002	Gate, Nand, Hex, 1-Input
B4	90311-002	Gate, Nand, Quad, 2-Input
B5	90310-002	Flip Flop, Clocked, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90354-820	Capacitor, Mica, 82Pf
C3	90354-820	Capacitor, Mica, 82Pf
C4	90356-002	Capacitor, Tantalum, 3.3Mf
Q1	90328-001	Transistor, NPN
Q2	90328-001	Transistor, NPN
Q3	90328-001	Transistor, NPN
Q4	90328-001	Transistor, NPN
Q5	90328-001	Transistor, NPN
Q6	90328-001	Transistor, NPN
R1	90364-471	Resistor, 1/4w, 5%, 470 ohms

Item	Part Number	Description
R2	90364-471	Resistor, 1/4w, 5%, 470 ohms
R3	90364-431	Resistor, 1/4w, 5%, 430 ohms
R4	90364-471	Resistor, 1/4w, 5%, 470 ohms
R5	90364-511	Resistor, 1/4w, 5%, 510 ohms
R6	90364-511	Resistor, 1/4w, 5%, 510 ohms
R7	90364-511	Resistor, 1/4w, 5%, 510 ohms
R8	90364-511	Resistor, 1/4w, 5%, 510 ohms
R9	90364-123	Resistor, 1/4w, 5%, 12K
R10	90364-202	Resistor, 1/4w, 5%, 2K

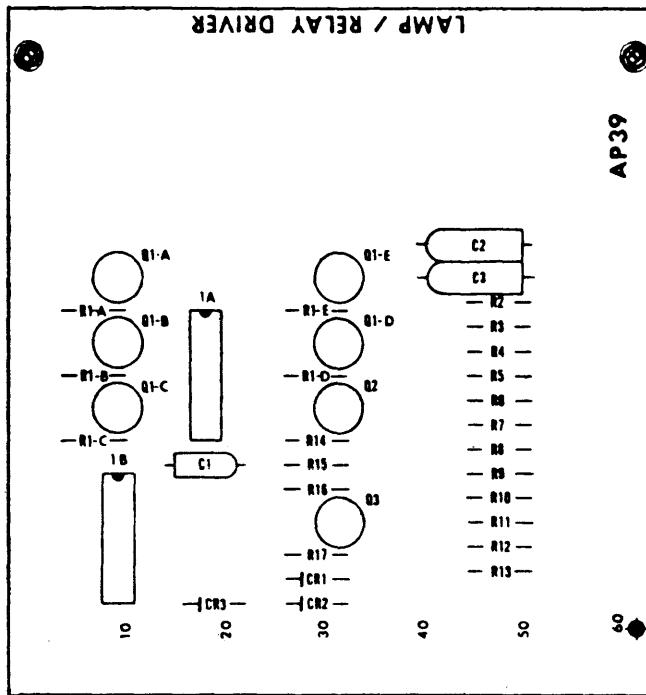


Figure 3-23. Assy, PWB, Lamp/Relay Driver, AP39

Item	Part Number	Description
1	94081-001	Assy, PWB, Lamp Relay Driver
2	90482-001	Board, PW, Lamp Relay Driver
3	90228-001	Insulator, Transistor Q1A-Q1E, Q2, Q3
A1	90314-001	Gate, Nand, Hex, 1-Input, DTL
B1	90311-001	Gate, Nand, Quad, 2-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90356-004	Capacitor, Tantalum, 33Mf
C3	90356-004	Capacitor, Tantalum, 33Mf
CR1	90342-001	Diode, General Purpose
CR2	90342-001	Diode, General Purpose
CR3	90342-001	Diode, General Purpose
Q1A	90326-001	Transistor, NPN
Q1B	90326-001	Transistor, NPN
Q1C	90326-001	Transistor, NPN
Q1D	90326-001	Transistor, NPN
Q1E	90326-001	Transistor, NPN
Q2	90326-001	Transistor, NPN
Q3	90326-001	Transistor, NPN
R1A	90364-102	Resistor, 1/4w, 5%, 1K
R1B	90364-102	Resistor, 1/4w, 5%, 1K
R1C	90364-102	Resistor, 1/4w, 5%, 1K
R1D	90364-102	Resistor, 1/4w, 5%, 1K
R1E	90364-102	Resistor, 1/4w, 5%, 1K

Item	Part Number	Description
R2	90364-202	Resistor, 1/4w, 5%, 2K
R3	90364-202	Resistor, 1/4w, 5%, 2K
R4	90364-202	Resistor, 1/4w, 5%, 2K
R5	90364-202	Resistor, 1/4w, 5%, 2K
R6	90364-202	Resistor, 1/4w, 5%, 2K
R7	90364-202	Resistor, 1/4w, 5%, 2K
R8	90364-202	Resistor, 1/4w, 5%, 2K
R9	90364-202	Resistor, 1/4w, 5%, 2K
R10	90364-102	Resistor, 1/4w, 5%, 1K
R11	90364-102	Resistor, 1/4w, 5%, 1K
R12	90364-151	Resistor, 1/4w, 5%, 150 ohms
R13	90364-301	Resistor, 1/4w, 5%, 300 ohms
R14	90364-510	Resistor, 1/4w, 5%, 51 ohms
R15	90364-511	Resistor, 1/4w, 5%, 510 ohms
R16	90364-103	Resistor, 1/4w, 5%, 10K
R17	90364-123	Resistor, 1/4w, 5%, 12K

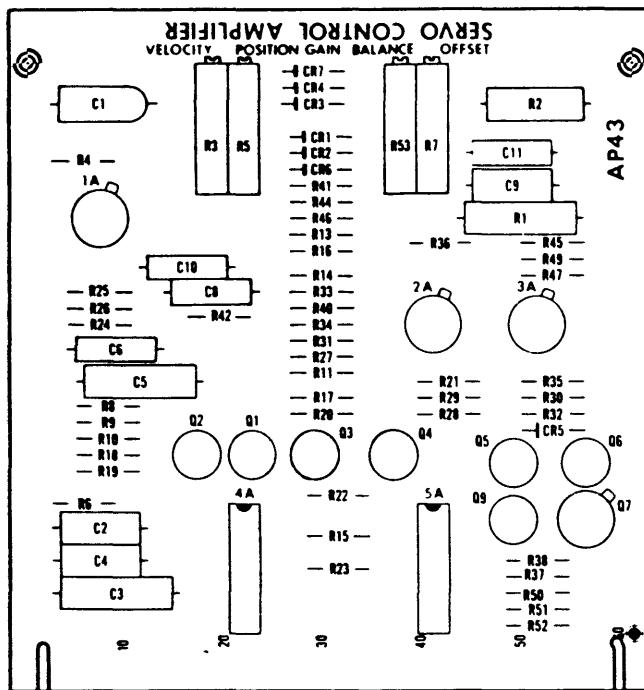


Figure 3-24. Assy, PWB, Servo Control Amplifier, AP43

Item	Part Number	Description
1	94478-001	Assy, PWB, Servo Control Amplifier
2	94479-001	Board, PW, Servo Control Amplifier
3	90228-001	Insulator, Transistor, Q1-Q6, Q9
4	90379-001	Insulator, Transistor, Q7
A1	92140-001	Amplifier, Operational
A2	92140-001	Amplifier, Operational
A3	92140-001	Amplifier, Operational
A4	90311-002	Gate, Nand, Quad, 2-Input, DTL
A5	90311-002	Gate, Nand, Quad, 2-Input, DTL
C1	90356-002	Capacitor, Tantalum, 3.3Mf
C2	90355-103	Capacitor, Mylar, .01Mf
C3	90360-002	Capacitor, Mylar, .022Mf
C4	90355-103	Capacitor, Mylar, .01Mf
C5	90360-022	Capacitor, Mylar, .22Mf
C6	90355-102	Capacitor, Mylar, .001Mf
C8	90355-153	Capacitor, Mylar, .015Mf
C9	90354-390	Capacitor, Mica, 39Pf
C10	90355-103	Capacitor, Mylar, .01Mf
C11	90355-102	Capacitor, Mylar, .001Mf
CR1	90346-062	Diode, Zener, 6.2V
CR2	90346-056	Diode, Zener, 5.6V
CR3	90346-056	Diode, Zener, 5.6V
CR4	90346-062	Diode, Zener, 6.2V
CR5	90342-001	Diode, General Purpose

Item	Part Number	Description
CR6	90342-001	Diode, General Purpose
CR7	90342-001	Diode, General Purpose
Q1	90326-002	Transistor, NPN
Q2	90326-002	Transistor, NPN
Q3	90326-002	Transistor, NPN
Q4	90326-002	Transistor, NPN
Q5	90326-002	Transistor, NPN
Q6	90326-002	Transistor, NPN
Q7	90330-001	Transistor, PNP
Q9	90338-001	Transistor, NPN
R1	90366-103	Resistor, 3w, 5%, 1K
R2	90365-271	Resistor, 1w, 5%, 270 ohms
R3	92244-210	Resistor, Variable, 3/4w, 5%, 1K
R4	90367-166	Resistor, 1/8w, 1%, 1.54K
R5	92244-310	Resistor, Variable, 3/4w, 5%, 10K
R6	90364-272	Resistor, 1/4w, 5%, 2.7K
R7	92244-310	Resistor, Variable, 3/4w, 5%, 10K
R8	90367-341	Resistor, 1/8w, 1%, 5.11K
R9	90367-341	Resistor, 1/8w, 1%, 5.11K
R10	90367-167	Resistor, 1/8w, 1%, 15.4K
R11	90367-397	Resistor, 1/8w, 1%, 7.5K
R13	90367-208	Resistor, 1/8w, 1%, 2.05K
R14	90367-105	Resistor, 1/8w, 1%, 100K
R15	90364-102	Resistor, 1/4w, 5%, 1K
R16	90367-264	Resistor, 1/8w, 1%, 3.01K
R17	90367-264	Resistor, 1/8w, 1%, 3.01K
R18	90367-264	Resistor, 1/8w, 1%, 3.01K
R19	90364-102	Resistor, 1/4w, 5%, 1K
R20	90367-341	Resistor, 1/8w, 1%, 5.11K
R21	90367-341	Resistor, 1/8w, 1%, 5.11K
R22	90364-102	Resistor, 1/4w, 5%, 1K
R23	90364-102	Resistor, 1/4w, 5%, 1K
R24	90364-103	Resistor, 1/4w, 5%, 10K
R25	90367-230	Resistor, 1/8w, 1%, 23.7K
R26	90367-264	Resistor, 1/8w, 1%, 3.01K
R27	90367-341	Resistor, 1/8w, 1%, 5.11K
R28	90367-341	Resistor, 1/8w, 1%, 5.11K
R29	90367-320	Resistor, 1/8w, 1%, 4.42K
R30	90364-103	Resistor, 1/4w, 5%, 10K
R31	90367-384	Resistor, 1/8w, 1%, 68.1K
R32	90364-512	Resistor, 1/4w, 5%, 5.1K
R33	90364-103	Resistor, 1/4w, 5%, 10K
R34	90367-104	Resistor, 1/8w, 1%, 10K
R35	90364-103	Resistor, 1/4w, 5%, 10K
R36	90367-320	Resistor, 1/8w, 1%, 4.42K
R37	90364-512	Resistor, 1/4w, 5%, 5.1K
R38	90364-153	Resistor, 1/4w, 5%, 15K

Item	Part Number	Description
R40	90367-105	Resistor, 1/8w, 1%, 100K
R41	90367-132	Resistor, 1/8w, 1%, 12.IK
R42	90367-104	Resistor, 1/8w, 1%, 10K
R44	90367-329	Resistor, 1/8w, 1%, 464K
R45	90367-266	Resistor, 1/8w, 1%, 301K
R46	90367-264	Resistor, 1/8w, 1%, 3.01K
R47	90367-105	Resistor, 1/8w, 1%, 100K
R49	90364-393	Resistor, 1/4w, 5%, 39K
R50	90364-512	Resistor, 1/4w, 5%, 5.1K
R51	90364-153	Resistor, 1/4w, 5%, 15K
R52	90364-152	Resistor, 1/4w, 5%, 1.5K
R53	92244-310	Resistor, Variable, 3/4w, 5%, 10K

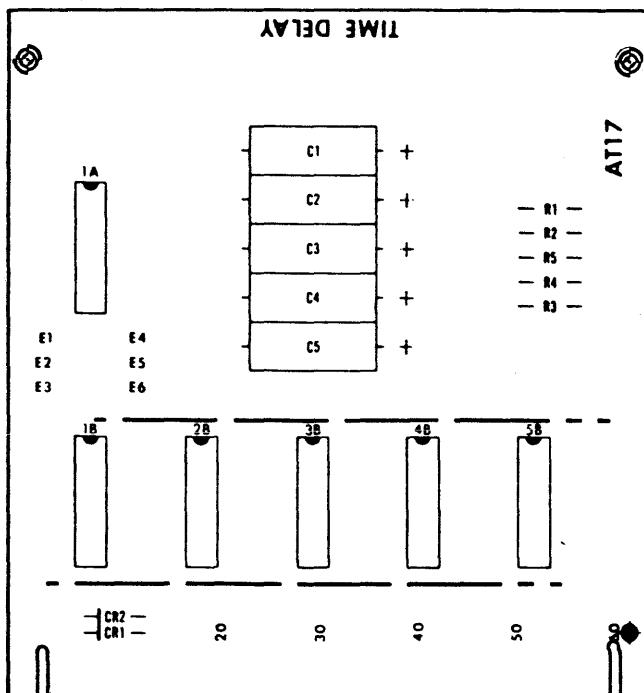


Figure 3-25. Assy, PWB, Time Delay, AT17

Item	Part Number	Description
1	94482-001	Assy, PWB, Time Delay
2	94483-001	Board, PW, Time Delay
A1	94526-002	Multivibrator, Dual, Monostable
B1	92130-002	Gate, Dual, 4-Input, TTL
B2	92136-002	Flip Flop, Dual, D-Type, TTL
B3	92136-002	Flip Flop, Dual, D-Type, TTL
B4	92128-002	Gate, Quad, 2-Input, TTL
B5	90313-002	Gate, Nand, Expandable, Dual, 4-Input, TTL
C1	90356-107	Capacitor, Tantalum, 100Mf
C2	90356-107	Capacitor, Tantalum, 100Mf
C3	90356-107	Capacitor, Tantalum, 100Mf
C4	90356-107	Capacitor, Tantalum, 100Mf
C5	90356-107	Capacitor, Tantalum, 100Mf
CR1	90342-001	Diode, General Purpose
CR2	90342-001	Diode, General Purpose
R1	90364-333	Resistor, 1/4w, 5%, 51K
R2	90364-333	Resistor, 1/4w, 5%, 33K
R3	90364-102	Resistor, 1/4w, 5%, 1K
R4	90364-102	Resistor, 1/4w, 5%, 1K
R5	90364-102	Resistor, 1/4w, 5%, 1K

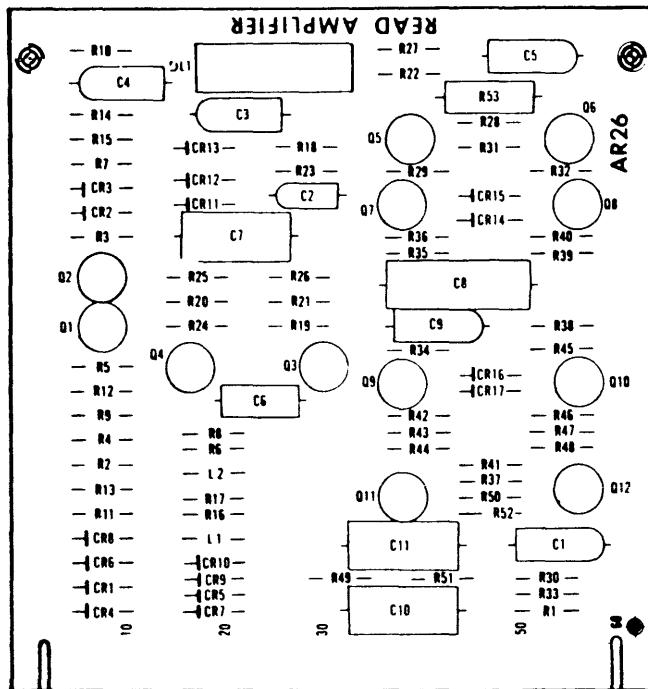


Figure 3-26. Assy, PWB, Read Amplifier, AR26

Item	Part Number	Description
1	94630-001	Assy, PWB, Read Amplifier
2	94631-001	Board, PW, Read Amplifier
3	90228-001	Insulator, Transistor
C1	90356-002	Capacitor, Tantalum, 3.3Mf
C2	90356-001	Capacitor, Tantalum, 4.7Mf
C3	90356-002	Capacitor, Tantalum, 3.3Mf
C4	90356-002	Capacitor, Tantalum, 3.3Mf
C5	90356-002	Capacitor, Tantalum, 3.3Mf
C6	90354-181	Capacitor, Mica, 180Pf
C7	90355-333	Capacitor, Mylar, .033Mf
C8	90355-104	Capacitor, Mylar, .1Mf
C9	90356-002	Capacitor, Tantalum, 3.3Mf
C10	90355-223	Capacitor, Mylar, .022Mf
C11	90355-223	Capacitor, Mylar, .022Mf
CR1	90343-001	Diode, Low Capacitance
CR2	90342-001	Diode, General Purpose
CR3	90342-001	Diode, General Purpose
CR4	90343-001	Diode, Low Capacitance
CR5	90343-001	Diode, Low Capacitance
CR6	90343-001	Diode, Low Capacitance
CR7	90343-001	Diode, Low Capacitance
CR8	90343-001	Diode, Low Capacitance
CR9	90343-001	Diode, Low Capacitance
CR10	90343-001	Diode, Low Capacitance

Item	Part Number	Description
CR11	90343-001	Diode, Low Capacitance
CR12	90343-001	Diode, Low Capacitance
CR13	90346-120	Diode, Zener, 12V
CR14	90343-001	Diode, Low Capacitance
CR15	90343-001	Diode, Low Capacitance
CR16	90343-001	Diode, Low Capacitance
CR17	90343-001	Diode, Low Capacitance
DL1	90377-002	Delay Line, Miniature
L1	90965-022	Inductor, Molded
L2	90965-022	Inductor, Molded
L3	90964-110	Inductor, Molded
Q1	90326-002	Transistor, NPN
Q2	90326-002	Transistor, NPN
Q3	90328-001	Transistor, NPN
Q4	90328-001	Transistor, NPN
Q5	90328-001	Transistor, NPN
Q6	90328-001	Transistor, NPN
Q7	90327-002	Transistor, PNP
Q8	90327-002	Transistor, PNP
Q9	90328-001	Transistor, NPN
Q10	90328-001	Transistor, NPN
Q11	90328-001	Transistor, NPN
Q12	90328-001	Transistor, NPN
R1	90364-510	Resistor, 1/4w, 5%, 51 ohms
R2	90367-103	Resistor, 1/8w, 1%, 1K
R3	90364-103	Resistor, 1/4w, 5%, 10K
R4	90367-103	Resistor, 1/8w, 1%, 1K
R5	90364-432	Resistor, 1/4w, 5%, 4.3K
R6	90367-103	Resistor, 1/8w, 1%, 1K
R7	90364-103	Resistor, 1/4w, 5%, 10K
R8	90367-103	Resistor, 1/8w, 1%, 1K
R9	90364-432	Resistor, 1/4w, 5%, 4.3K
R10	90364-510	Resistor, 1/4w, 5%, 51 ohms
R11	90364-397	Resistor, 1/8w, 1%, 7.5K
R12	90364-432	Resistor, 1/4w, 5%, 51 ohms
R13	90367-397	Resistor, 1/8w, 1%, 7.5K
R14	90364-102	Resistor, 1/4w, 5%, 1K
R15	90364-102	Resistor, 1/4w, 5%, 1K
R16	90367-395	Resistor, 1/8w, 1%, 75 ohms
R17	90367-395	Resistor, 1/8w, 1%, 75 ohms
R18	90367-340	Resistor, 1/8w, 1%, 511 ohms
R19	90367-102	Resistor, 1/8w, 1%, 100 ohms
R20	90364-152	Resistor, 1/4w, 5%, 1.5K
R21	90364-152	Resistor, 1/4w, 5%, 1.5K
R22	90364-510	Resistor, 1/4w, 5%, 51 ohms
R23	90367-340	Resistor, 1/8w, 1%, 511 ohms
R24	90367-102	Resistor, 1/8w, 1%, 100 ohms
R25	90364-152	Resistor, 1/4w, 5%, 1.5K

Item	Part Number	Description
R26	90364-152	Resistor, $\frac{1}{4}$ w, 5%, 1.5K
R27	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R28	90364-101	Resistor, $\frac{1}{4}$ w, 5%, 100 ohms
R29	90364-362	Resistor, $\frac{1}{4}$ w, 5%, 3.6K
R30	90364-471	Resistor, $\frac{1}{4}$ w, 5%, 470 ohms
R31	90364-101	Resistor, $\frac{1}{4}$ w, 5%, 100 ohms
R32	90364-362	Resistor, $\frac{1}{4}$ w, 5%, 3.6K
R33	90364-471	Resistor, $\frac{1}{4}$ w, 5%, 470 ohms
R34	90367-187	Resistor, 1/8w, 1%, 1.78K
R35	90367-276	Resistor, 1/8w, 1%, 33.2 ohms
R36	90367-340	Resistor, 1/8w, 1%, 511 ohms
R37	90364-122	Resistor, $\frac{1}{4}$ w, 5%, 1.2K
R38	90367-187	Resistor, 1/8w, 1%, 1.78K
R39	90367-276	Resistor, 1/8w, 1%, 33.2 ohms
R40	90367-340	Resistor, 1/8w, 1%, 511 ohms
R41	90364-102	Resistor, $\frac{1}{4}$ w, 5%, 1K
R42	90364-511	Resistor, $\frac{1}{4}$ w, 5%, 510 ohms
R43	90367-276	Resistor, 1/8w, 1%, 51.1 ohms
R44	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R45	90364-122	Resistor, $\frac{1}{4}$ w, 5%, 1.2K
R46	90364-511	Resistor, $\frac{1}{4}$ w, 5%, 510 ohms
R47	90367-339	Resistor, 1/8w, 1%, 51.1 ohms
R48	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R49	90364-201	Resistor, $\frac{1}{4}$ w, 5%, 200 ohms
R50	90364-512	Resistor, $\frac{1}{4}$ w, 5%, 5.1K
R51	90364-201	Resistor, $\frac{1}{4}$ w, 5%, 200 ohms
R52	90364-512	Resistor, $\frac{1}{4}$ w, 5%, 5.1K

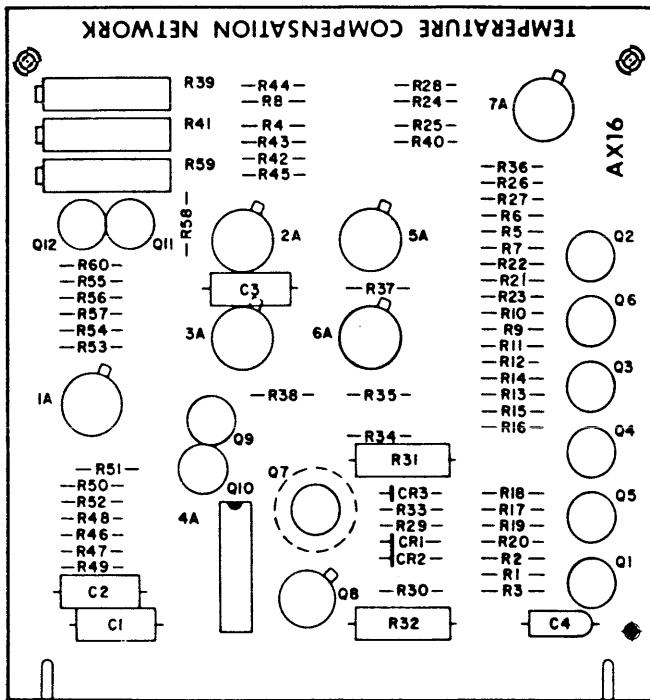
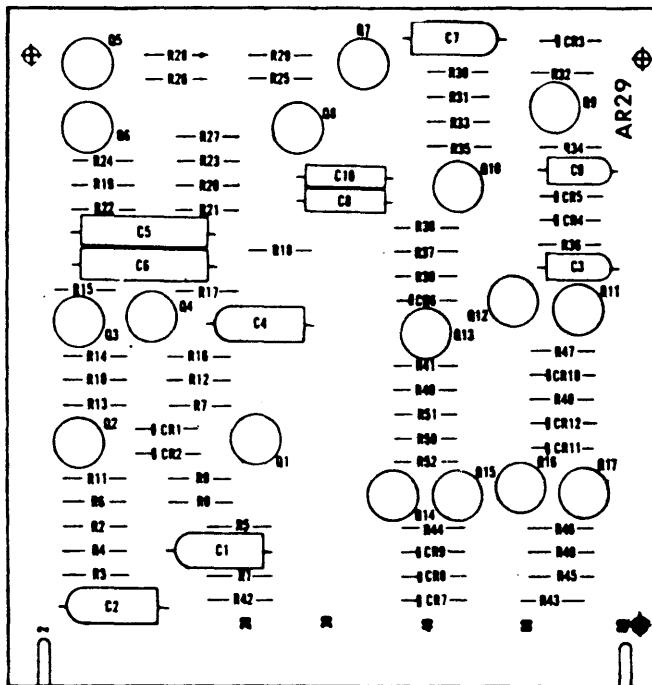


Figure 3-27. Assy, PWB, Temperature Compensation Network, AX16

Item	Part Number	Description
1	94674-001	Assy, PWB, Temperature Compensation Network
2	94675-001	Board, PW, Temperature Compensation Network
3	90228-001	Insulator, Transistor, Q1-Q7, Q9-Q12
4	90378-001	Heat Sink, Fan Top Q7
5	90379-001	Insulator, Transistor, Q8
A1	92140-001	Amplifier, Operational
A2	92140-001	Amplifier, Operational
A3	92138-001	Amplifier, Operational
A4	90314-002	Gate, Nand, Hex, 1-Input, DTL
A5	92138-001	Amplifier, Operational
A6	92140-001	Amplifier, Operational
A7	92138-001	Amplifier, Operational
C1	90355-103	Capacitor, Mylar, .01Mf
C2	90355-103	Capacitor, Mylar, .01Mf
C3	90355-103	Capacitor, Mylar, .01Mf
C4	90356-001	Capacitor, Tantalum, 4.7Mf
CR1	90346-120	Diode, Zener, 12V
CR2	90346-120	Diode, Zener, 12V
CR3	90346-082	Diode, Zener, 8.2V
Q1	90327-002	Transistor, PNP
Q2	90327-002	Transistor, PNP
Q3	90327-002	Transistor, PNP
Q4	90327-002	Transistor, PNP
Q5	90327-002	Transistor, PNP

Item	Part Number	Description
Q6	90327-002	Transistor, PNP
Q7	90338-001	Transistor, NPN
Q8	90330-002	Transistor, PNP
Q9	90326-002	Transistor, NPN
Q10	90326-002	Transistor, NPN
Q11	90326-002	Transistor, NPN
Q12	90327-002	Transistor, PNP
R1	90364-102	Resistor, 1/4w, 5%, 10K
R2	90364-512	Resistor, 1/4w, 5%, 5.1K
R3	90367-297	Resistor, 1/8w, 1%, 33.2K
R4	90367-313	Resistor, 1/8w, 1%, 4.22K
R5	90364-103	Resistor, 1/4w, 5%, 10K
R6	90364-512	Resistor, 1/4w, 5%, 5.1K
R7	90367-174	Resistor, 1/8w, 1%, 16.2K
R8	90367-313	Resistor, 1/8w, 1%, 4.22K
R9	90364-103	Resistor, 1/4w, 5%, 10K
R10	90364-512	Resistor, 1/4w, 5%, 5.1K
R11	90367-411	Resistor, 1/8w, 1%, 8.25K
R12	90364-274	Resistor, 1/4w, 5%, 270K
R13	90364-103	Resistor, 1/4w, 5%, 10K
R14	90364-512	Resistor, 1/4w, 5%, 5.1K
R15	90367-313	Resistor, 1/8w, 1%, 4.22K
R16	90364-753	Resistor, 1/4w, 5%, 75K
R17	90364-103	Resistor, 1/4w, 5%, 10K
R18	90364-512	Resistor, 1/4w, 5%, 5.1K
R19	90367-208	Resistor, 1/8w, 1%, 2.05K
R20	90364-823	Resistor, 1/4w, 5%, 82K
R21	90364-103	Resistor, 1/4w, 5%, 10K
R22	90364-512	Resistor, 1/4w, 5%, 5.1K
R23	90367-103	Resistor, 1/8w, 1%, 1K
R24	90367-145	Resistor, 1/8w, 1%, 1.33K
R25	90367-208	Resistor, 1/8w, 1%, 2.05K
R26	90367-118	Resistor, 1/8w, 1%, 3.01K
R27	90367-271	Resistor, 1/8w, 1%, 3.16K
R28	90367-340	Resistor, 1/8w, 1%, 511 ohms
R29	90364-122	Resistor, 1/4w, 5%, 1.2K
R30	90364-122	Resistor, 1/4w, 5%, 1.2K
R31	90365-201	Resistor, 1w, 5%, 200 ohms
R32	90365-201	Resistor, 1w, 5%, 200 ohms
R33	90364-202	Resistor, 1/4w, 5%, 2K
R34	90367-229	Resistor, 1/8w, 1%, 2.37K
R35	90367-229	Resistor, 1/8w, 1%, 2.37K
R36	90367-390	Resistor, 1/8w, 1%, 7.15K
R37	90367-277	Resistor, 1/8w, 1%, 332 ohms
R38	90367-103	Resistor, 1/8w, 1%, 1K
R39	92244-250	Resistor, Variable, 3/4w, 20%, 2K
R40	90367-313	Resistor, 1/8w, 1%, 4.22K
R41	92244-220	Resistor, Variable, 3/4w, 20%, 2K

Item	Part Number	Description
R42	90367-237	Resistor, 1/8w, 1%, 24.9K
R43	90367-237	Resistor, 1/8w, 1%, 24.9K
R44	90367-161	Resistor, 1/8w, 1%, 147K
R45	90367-161	Resistor, 1/8w, 1%, 147K
R46	90364-242	Resistor, 1/8w, 5%, 2.4K
R47	90364-242	Resistor, 1/8w, 5%, 2.4K
R48	90367-425	Resistor, 1/8w, 1%, 9.09K
R49	90367-341	Resistor, 1/8w, 1%, 5.11K
R50	90367-341	Resistor, 1/8w, 1%, 5.11K
R51	90367-341	Resistor, 1/8w, 1%, 5.11K
R52	90367-313	Resistor, 1/8w, 1%, 4.22K
R53	90367-313	Resistor, 1/8w, 1%, 4.22K
R54	90367-202	Resistor, 1/8w, 1%, 19.6K
R55	90367-223	Resistor, 1/8w, 1%, 22.6K
R56	90367-313	Resistor, 1/8w, 1%, 4.22K
R57	90367-328	Resistor, 1/8w, 1%, 46.4K
R58	90367-103	Resistor, 1/8w, 1%, 1K
R59	92244-310	Resistor, Variable, 3/4w, 20%, 10K
R60	90367-257	Resistor, 1/8w, 1%, 2.87K



Item	Part Number	Description
CR12	90343-001	Diode, Low Capacitance
Q1	90328-001	Transistor, NPN
Q2	90328-001	Transistor, NPN
Q3	90326-001	Transistor, NPN
Q4	90326-001	Transistor, NPN
Q5	90328-001	Transistor, NPN
Q6	90328-001	Transistor, NPN
Q7	90326-001	Transistor, NPN
Q8	90326-001	Transistor, NPN
Q9	90328-001	Transistor, NPN
Q10	90328-001	Transistor, NPN
Q11	90328-001	Transistor, NPN
Q12	90328-001	Transistor, NPN
Q13	90328-001	Transistor, NPN
Q14	90326-001	Transistor, NPN
Q15	90328-001	Transistor, NPN
Q16	90328-001	Transistor, NPN
Q17	90328-001	Transistor, NPN
R1	90367-326	Resistor, 1/8w, 1%, 464 ohms
R2	90367-326	Resistor, 1/8w, 1%, 464 ohms
R3	90364-152	Resistor, 1/4w, 5%, 1.5K
R4	90364-432	Resistor, 1/4w, 5%, 4.3K
R5	90364-510	Resistor, 1/4w, 5%, 51 ohms
R6	90364-510	Resistor, 1/4w, 5%, 51 ohms
R7	90367-410	Resistor, 1/8w, 1%, 825 ohms
R8	90367-341	Resistor, 1/8w, 1%, 5.11K
R9	90364-510	Resistor, 1/4w, 5%, 51 ohms
R10	90367-410	Resistor, 1/8w, 1%, 825 ohms
R11	90367-341	Resistor, 1/8w, 1%, 5.11K
R12	90364-510	Resistor, 1/4w, 5%, 51 ohms
R13	90364-510	Resistor, 1/4w, 5%, 51 ohms
R14	90364-510	Resistor, 1/4w, 5%, 51 ohms
R15	90364-432	Resistor, 1/4w, 5%, 4.3K
R16	90364-510	Resistor, 1/4w, 5%, 51 ohms
R17	90364-432	Resistor, 1/4w, 5%, 4.3K
R18	90367-262	Resistor, 1/8w, 1%, 30.1 ohms
R19	90367-264	Resistor, 1/8w, 1%, 3.01K
R20	90367-264	Resistor, 1/8w, 1%, 3.01K
R21	90367-277	Resistor, 1/8w, 1%, 332 ohms
R22	90367-277	Resistor, 1/8w, 1%, 332 ohms
R23	90364-510	Resistor, 1/4w, 5%, 51 ohms
R24	90364-510	Resistor, 1/4w, 5%, 51 ohms
R25	90367-291	Resistor, 1/8w, 1%, 365 ohms
R26	90367-291	Resistor, 1/8w, 1%, 365 ohms
R27	90367-131	Resistor, 1/8w, 1%, 1.21K
R28	90364-510	Resistor, 1/4w, 5%, 51 ohms
R29	90364-510	Resistor, 1/4w, 5%, 51 ohms
R30	90364-432	Resistor, 1/4w, 5%, 4.3K

Item	Part Number	Description
R31	90364-432	Resistor, $\frac{1}{4}$ w, 5%, 4.3K
R32	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R33	90564-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R34	90367-312	Resistor, 1/8w, 1%, 422 ohms
R35	90367-264	Resistor, 1/8w, 1%, 3.01K
R36	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R37	90367-312	Resistor, 1/8w, 1%, 422 ohms
R38	90367-264	Resistor, 1/8w, 1%, 3.01K
R39	90364-510	Resistor, $\frac{1}{4}$ w, 5%, 51 ohms
R40	90364-332	Resistor, $\frac{1}{4}$ w, 5%, 3.3K
R41	90364-432	Resistor, $\frac{1}{4}$ w, 5%, 4.3K
R42	90367-101	Resistor, 1/8w, 1%, 10 ohms
R43	90364-202	Resistor, $\frac{1}{4}$ w, 5%, 2K
R44	90364-102	Resistor, $\frac{1}{4}$ w, 5%, 1K
R45	90364-302	Resistor, $\frac{1}{4}$ w, 5%, 3K
R46	90364-201	Resistor, $\frac{1}{4}$ w, 5%, 200 ohms
R47	90364-302	Resistor, $\frac{1}{4}$ w, 5%, 3K
R48	90364-301	Resistor, $\frac{1}{4}$ w, 5%, 300 ohms
R49	90364-911	Resistor, $\frac{1}{4}$ w, 5%, 910 ohms
R50	90364-243	Resistor, $\frac{1}{4}$ w, 5%, 24K
R51	90364-201	Resistor, $\frac{1}{4}$ w, 5%, 200 ohms
R52	90364-301	Resistor, $\frac{1}{4}$ w, 5%, 300 ohms

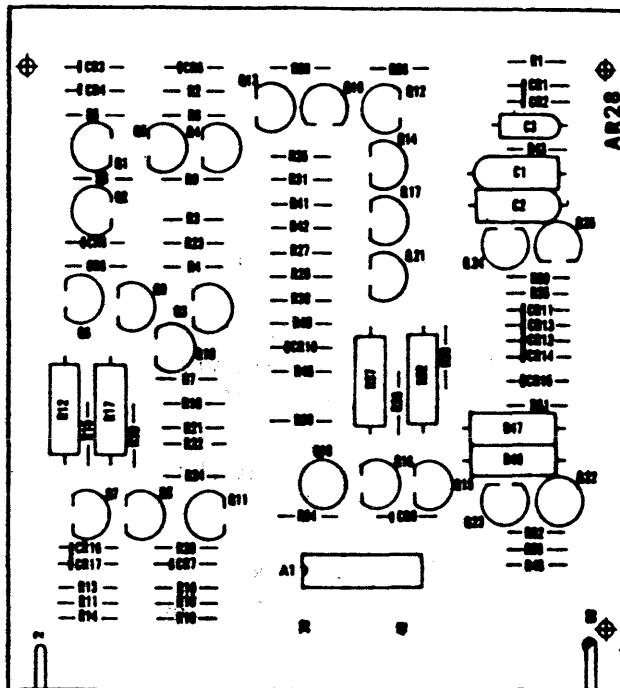


Figure 3-29. Assy, PWB, Write Driver, AR28

Item	Part Number	Description
1	94709-001	Assy, PWB, Write Driver
2	94710-001	Board, PW, Write Driver
3	90228-001	Insulator, Transistor, Q18,Q22
A1	90314-002	Gate, Nand, Hex, 1-Input, DTL
C1	90356-002	Capacitor, Tantalum, 3.3Mf
C2	90356-002	Capacitor, Tantalum, 3.3Mf
C3	90356-001	Capacitor, Tantalum, 4.7Mf
CR1	90344-002	Diode, Medium Current
CR2	90344-002	Diode, Medium Current
CR3	90342-001	Diode, General Purpose
CR4	90342-001	Diode, General Purpose
CR5	90342-001	Diode, General Purpose
CR6	90344-002	Diode, Medium Current
CR7	90342-001	Diode, General Purpose
CR8	90342-001	Diode, General Purpose
CR9	90342-001	Diode, General Purpose
CR10	90342-001	Diode, General Purpose
CR11	90346-082	Diode, Zener, 8.2V
CR12	90364-062	Diode, Zener, 6.2V
CR13	90342-001	Diode, General Purpose
CR14	90342-001	Diode, General Purpose
CR15	90342-001	Diode, General Purpose
CR16	90343-001	Diode, Low Capacitance
CR17	90343-001	Diode, Low Capacitance

Item	Part Number	Description
Q1	90326-002	Transistor, NPN
Q2	90326-002	Transistor, NPN
Q3	90326-002	Transistor, NPN
Q4	90327-002	Transistor, PNP
Q5	90327-002	Transistor, PNP
Q6	90327-002	Transistor, PNP
Q7	90327-002	Transistor, PNP
Q8	90327-002	Transistor, PNP
Q9	90327-002	Transistor, PNP
Q10	90326-002	Transistor, NPN
Q11	90326-002	Transistor, NPN
Q12	90326-002	Transistor, NPN
Q13	90326-002	Transistor, NPN
Q14	90326-002	Transistor, NPN
Q15	90326-002	Transistor, NPN
Q16	90326-002	Transistor, NPN
Q17	90326-002	Transistor, NPN
Q18	90326-002	Transistor, NPN
Q19	90326-002	Transistor, NPN
Q21	90326-002	Transistor, NPN
Q22	90326-002	Resistor
Q23	90326-002	Transistor, NPN
Q24	90326-002	Transistor, NPN
Q25	90327-002	Transistor, PNP
R1	90364-331	Resistor, 1/4w, 5%, 330 ohm
R2	90364-333	Resistor, 1/4w, 5%, 33K
R3	90364-333	Resistor, 1/4w, 5%, 33K
R4	90364-333	Resistor, 1/4w, 5%, 33K
R5	90364-432	Resistor, 1/4w, 5%, 4.3K
R6	90364-103	Resistor, 1/4w, 5%, 10K
R7	90364-103	Resistor, 1/4w, 5%, 10K
R8	90364-102	Resistor, 1/4w, 5%, 1K
R9	90364-202	Resistor, 1/4w, 5%, 2K
R10	90364-152	Resistor, 1/4w, 5%, 1.5K
R11	90364-243	Resistor, 1/4w, 5%, 24K
R12	90366-382	Resistor, 1/4w, 5%, 680 ohm
R13	90364-121	Resistor, 1/4w, 5%, 120 ohm
R14	90364-392	Resistor, 1/4w, 5%, 3.9K
R15	90364-153	Resistor, 1/4w, 5%, 15K
R16	90364-242	Resistor, 1/4w, 5%, 24K
R17	90366-382	Resistor, 1/4w, 5%, 680 ohm
R18	90364-121	Resistor, 1/4w, 5%, 120 ohm
R19	90364-392	Resistor, 1/4w, 5%, 3.9K
R20	90364-243	Resistor, 1/4w, 5%, 24K
R21	90364-152	Resistor, 1/4w, 5%, 1.5K
R22	90364-103	Resistor, 1/4w, 5%, 10K
R23	90364-333	Resistor, 1/4w, 5%, 33K
R24	90364-512	Resistor, 1/4w, 5%, 5.1K

Item	Part Number	Description
R25	90364-333	Resistor, 1/4w, 5%, 33K
R26	90364-103	Resistor, 1/4w, 5%, 10K
R27	90364-103	Resistor, 1/4w, 5%, 10K
R28	90364-202	Resistor, 1/4w, 5%, 2K
R29	90364-152	Resistor, 1/4w, 5%, 1.5K
R30	90364-153	Resistor, 1/4w, 5%, 15K
R31	90364-620	Resistor, 1/4w, 5%, 62 ohm
R32	90365-271	Resistor, 1/4w, 5%, 270 ohm
R33	90364-472	Resistor, 1/4w, 5%, 4.7K
R34	90364-243	Resistor, 1/4w, 5%, 24K
R35	90364-221	Resistor, 1/4w, 5%, 220 ohm
R36	90364-472	Resistor, 1/4w, 5%, 4.7K
R37	90365-271	Resistor, 1/4w, 5%, 270 ohm
R38	90364-152	Resistor, 1/4w, 5%, 1.5K
R39	90364-512	Resistor, 1/4w, 5%, 5.1K
R40	90364-103	Resistor, 1/4w, 5%, 10K
R41	90364-202	Resistor, 1/4w, 5%, 2K
R42	90364-103	Resistor, 1/4w, 5%, 10K
R43	90364-751	Resistor, 1/4w, 5%, 750 ohm
R45	90364-333	Resistor, 1/4w, 5%, 33K
R46	90364-101	Resistor, 1/4w, 5%, 100 ohm
R47	90365-202	Resistor, 1/4w, 5%, 2K
R49	90365-202	Resistor, 1/4w, 5%, 2K
R50	90365-202	Resistor, 1/4w, 5%, 2K
R51	90364-102	Resistor, 1/4w, 5%, 1K
R52	90364-151	Resistor, 1/4w, 5%, 150 ohm
R53	90364-361	Resistor, 1/4w, 5%, 360 ohms

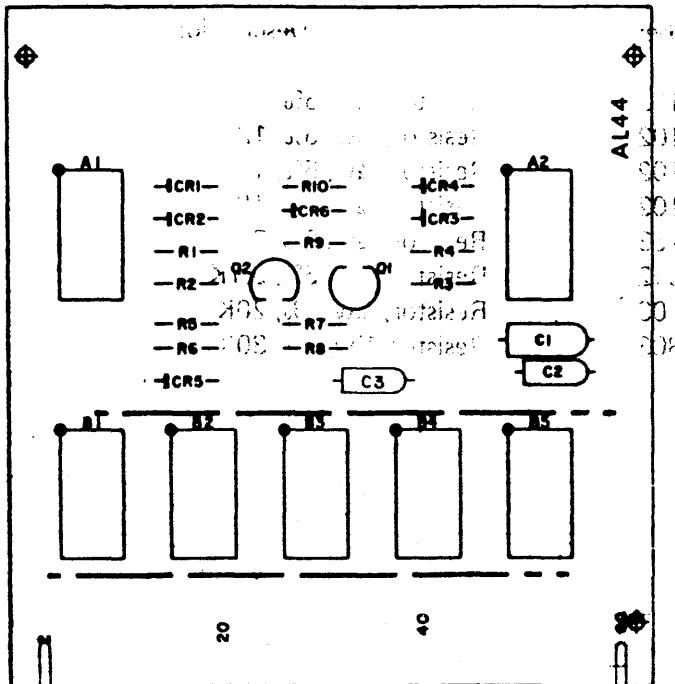


Figure 3-30. Assy, PWB, Control Logic II, AL44

Item	Part Number	Description
1	94742-001	Assy, PWB, Control Logic II
2	94743-001	Board, PW, Control Logic II
3	90228-001	Insulator, Transistor
A1	90313-002	Gate, Nand, Dual, 4-Input, DTL
A2	90313-002	Gate, Nand, Dual, 4-Input, DTL
B1	90310-002	Flip Flop, Clocked, DTL
B2	90313-002	Gate, Nand, Dual, 4-Input, DTL
B3	90314-002	Gate, Nand, Hex, 1-Input, DTL
B4	90314-002	Gate, Nand, Hex, 1-Input, DTL
B5	90310-002	Flip Flop, Clocked, DTL
C1	90356-002	Capacitor, Tantalum, 3.3Mf
C2	90356-001	Capacitor, Tantalum, 4.7Mf
C3	90356-001	Capacitor, Tantalum, 4.7Mf
CR1	90343-001	Diode, Low Capacitance
CR2	90343-001	Diode, Low Capacitance
CR3	90343-001	Diode, Low Capacitance
CR4	90343-001	Diode, Low Capacitance
CR5	90343-001	Diode, Low Capacitance
CR6	90343-001	Diode, Low Capacitance
Q1	90327-002	Transistor, NPN
Q2	90326-022	Transistor, PNP
R1	90364-102	Resistor, 1/4w, 5%, 1K
R2	90364-102	Resistor, 1/4w, 5%, 1K

Item	Part Number	Description
R3	90364-102	Resistor, 1/4w, 5%, 1K
R4	90364-102	Resistor, 1/4w, 5%, 1K
R5	90364-102	Resistor, 1/4w, 5%, 1K
R6	90364-102	Resistor, 1/4w, 5%, 1K
R7	90364-753	Resistor, 1/4w, 5%, 75K
R8	90364-512	Resistor, 1/4w, 5%, 51K
R9	90364-203	Resistor, 1/4w, 5%, 20K
R10	90364-303	Resistor, 1/4w, 5%, 30K

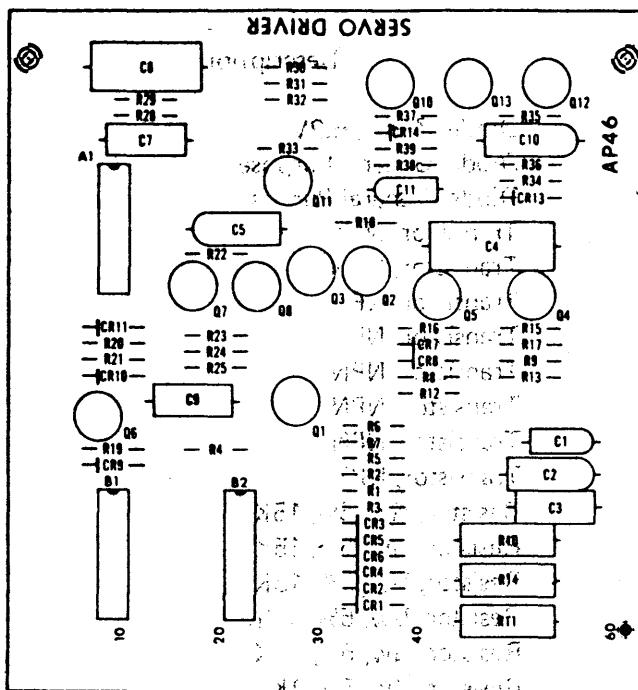


Figure 3-31. Assy, PWB, Servo Driver, AP46

Item	Part Number	Description
1	95086-001	Assy, PWB, Servo Driver
2	95087-001	Board, PW, Servo Driver
A1	94526-002	Multivibrator, Dual
B1	90311-002	Gate, Nand, Quad, 2-Input, DTL
B2	90314-002	Gate, Nand, Hex, 1-Input, DTL
C1	90356-001	Capacitor, Tantalum, 4.7Mf
C2	90356-002	Capacitor, Tantalum, 3.3Mf
C3	90355-153	Capacitor, Mylar, .015Mf
C4	90355-473	Capacitor, Mylar, .047Mf
C5	90356-002	Capacitor, Tantalum, 3.3Mf
C7	90355-103	Capacitor, Mylar, .01Mf
C8	90355-223	Capacitor, Mylar, .022Mf
C9	90354-681	Capacitor, Mica, 680Pf
C10	90356-004	Capacitor, Tantalum, .33Mf
C11	90356-001	Capacitor, Tantalum, 4.7Mf
CR1	90342-001	Diode, General Purpose
CR2	90342-001	Diode, General Purpose
CR3	90343-001	Diode, Low Capacitance
CR4	90342-001	Diode, General Purpose
CR5	90343-001	Diode, Low Capacitance
CR6	90343-001	Diode, Low Capacitance
CR7	90343-001	Diode, Low Capacitance
CR8	90343-001	Diode, Low Capacitance
CR9	90342-001	Diode, General Purpose
CR10	90343-001	Diode, Low Capacitance

Item	Part Number	Description
CR11	90346-062	Diode, Zener, 6.2V
CR13	90342-001	Diode, General Purpose
CR14	90342-001	Diode, General Purpose
Q1	90326-002	Transistor, NPN
Q2	90338-001	Transistor, NPN
Q3	90338-001	Transistor, NPN
Q4	90338-001	Transistor, NPN
Q5	90338-001	Transistor, NPN
Q6	90326-002	Transistor, NPN
Q7	90328-001	Transistor, NPN
Q8	90328-001	Transistor, NPN
R1	90364-153	Resistor, $\frac{1}{4}w$, 5%, 15K
R2	90364-153	Resistor, $\frac{1}{4}w$, 5%, 15K
R3	90364-153	Resistor, $\frac{1}{4}w$, 5%, 15K
R4	90364-472	Resistor, $\frac{1}{4}w$, 5%, 4.7K
R5	90364-123	Resistor, $\frac{1}{4}w$, 5%, 12K
R6	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R7	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R8	90367-103	Resistor, $\frac{1}{8}w$, 1%, 1K
R9	90367-220	Resistor, $\frac{1}{8}w$, 1%, 22.6 ohms
R10	90365-152	Resistor, 1w, 5%, 1.5K
R11	90365-272	Resistor, 1w, 5%, 2.7K
R12	90367-220	Resistor, $\frac{1}{8}w$, 1%, 22.6 ohms
R13	Deleted	
R14	90365-272	Resistor, 1w, 5%, 2.7K
R15	90367-103	Resistor, $\frac{1}{8}w$, 1%, 1K
R16	90367-104	Resistor, $\frac{1}{8}w$, 1%, 10K
R17	90367-104	Resistor, $\frac{1}{8}w$, 1%, 10K
R18	90364-103	Resistor, $\frac{1}{4}w$, 5%, 10K
R19	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R20	90367-313	Resistor, $\frac{1}{8}w$, 1%, 4.22K
R21	90364-510	Resistor, $\frac{1}{4}w$, 5%, 51 ohms
R22	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R23	90364-513	Resistor, $\frac{1}{4}w$, 5%, 51K
R24	90364-103	Resistor, $\frac{1}{4}w$, 5%, 10K
R25	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R28	90367-174	Resistor, $\frac{1}{8}w$, 1%, 16.2K
R29	90367-174	Resistor, $\frac{1}{8}w$, 1%, 16.2K
R30	90364-512	Resistor, $\frac{1}{4}w$, 5%, 5.1K
R31	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R32	90364-102	Resistor, $\frac{1}{4}w$, 5%, 1K
R33	90364-200	Resistor, $\frac{1}{4}w$, 5%, 20 ohms
R34	90364-103	Resistor, $\frac{1}{4}w$, 5%, 10K
R35	90364-104	Resistor, $\frac{1}{4}w$, 5%, 100K
R36	90364-303	Resistor, $\frac{1}{4}w$, 5%, 30K
R37	90364-103	Resistor, $\frac{1}{4}w$, 5%, 10K
R38	90364-103	Resistor, $\frac{1}{4}w$, 5%, 10K
R39	90364-103	Resistor, $\frac{1}{4}w$, 5%, 10K

